

10/588514

\*\*\*\*\* QUERY RESULTS \*\*\*\*\*

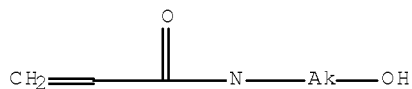
=> d his l28

(FILE 'HCAPLUS' ENTERED AT 12:09:42 ON 15 OCT 2009)

L28 39 S L23 OR L25 OR L27  
SAVE TEMP L28 PEZ514HCAP/A

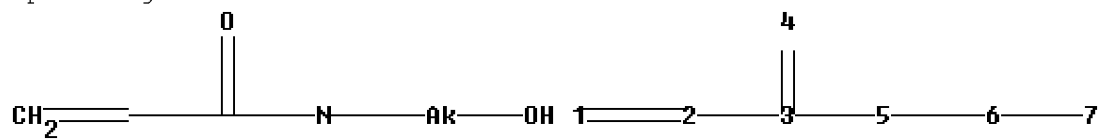
=> d que l28

L3 STR



Structure attributes must be viewed using STN Express query preparation:

Uploading L1.str



chain nodes :

1 2 3 4 5 6 7

chain bonds :

1-2 2-3 3-4 3-5 5-6 6-7

exact/norm bonds :

3-4 3-5 5-6 6-7

exact bonds :

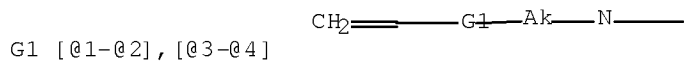
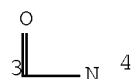
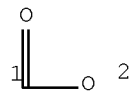
1-2 2-3

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS

L4

STR

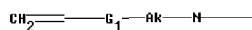
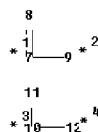
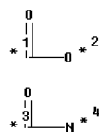


G1 [@1-@2], [@3-@4]

10/588514

Structure attributes must be viewed using STN Express query preparation:

Uploading L2.str

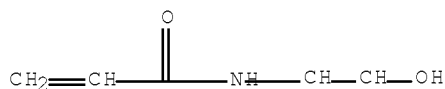


chain nodes :  
1 2 3 4 5 7 8 9 10 11 12  
ring/chain nodes :  
6  
chain bonds :  
1-2 2-5 3-4 3-5 4-6 7-8 7-9 10-11 10-12  
exact/norm bonds :  
2-5 3-4 3-5 4-6 7-8 7-9 10-11 10-12  
exact bonds :  
1-2

G1:[\*1-\*2],[\*3-\*4]

Match level :  
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS  
10:CLASS 11:CLASS 12:CLASS

L5 SCR 2043  
L9 2669 SEA FILE=REGISTRY SSS FUL L3 AND L4 AND L5  
L11 STR

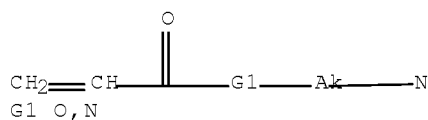


Structure attributes must be viewed using STN Express query preparation:

Uploading L4.st

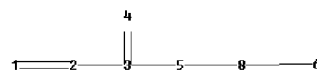
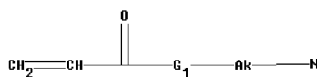
L13 134 SEA FILE=REGISTRY SUB=L9 SSS FUL L11  
L14 STR

10/588514



Structure attributes must be viewed using STN Express query preparation:

Uploading L6.str



chain nodes :

1 2 3 4 5 6 8

chain bonds :

1-2 2-3 3-4 3-5 5-8 6-8

exact/norm bonds :

3-4 3-5 5-8 6-8

exact bonds :

1-2 2-3

G1:O,N

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 8:CLASS

L16	1286	SEA FILE=REGISTRY SUB=L9	SSS FUL	L14
L17	111	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L13
L18	791	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L16
L19	798	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L17 OR L18
L20	655	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L19 AND (AY<2006 OR PY<2006 OR PRY<2006)
L21	105	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L20 AND 38/SC, SX
L23	21	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L21 (L) (COS OR BIOL)/RL
L24	270376	SEA FILE=HCAPLUS ABB=ON	PLU=ON	(H2O OR WATER) (2A) SOLUB?
L25	11	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L21 AND L24
L26	492082	SEA FILE=HCAPLUS ABB=ON	PLU=ON	ABSORB?
L27	12	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L21 AND L26
L28	39	SEA FILE=HCAPLUS ABB=ON	PLU=ON	L23 OR L25 OR L27

=> d 128 1-39 ibib abs fhitr hitind

L28 ANSWER 1 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:1251703 HCAPLUS Full-text

DOCUMENT NUMBER: 146:33208

TITLE: Biocompatible polymers and copolymers preparation and medical use

INVENTOR(S): Hitz, Hans; Schaefer, Rolf; Schaefer, Christoph

PATENT ASSIGNEE(S): Chemisches Institut Schaefer A.-G., Switz.

SOURCE: PCT Int. Appl., 41pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006126095	A2	20061130	WO 2006-IB1722	20060522 <--
WO 2006126095	A3	20071206		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
AU 2006250914	A1	20061130	AU 2006-250914	20060522 <--
CA 2606284	A1	20061130	CA 2006-2606284	20060522 <--
EP 1888660	A2	20080220	EP 2006-755963	20060522 <--
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
JP 2008545832	T	20081218	JP 2008-512950	20060522 <--
US 20090232871	A1	20090917	US 2007-920507	20071116 <--
PRIORITY APPLN. INFO.:			US 2005-684175P	P 20050525 <--
			WO 2006-IB1722	W 20060522

AB The invention relates to highly biocompatible or biophilic un-crosslinked or cross-linked polymers comprising one or more side-chain active acrylic amino acids. The invention further concerns various highly biocompatible, crosslinked copolymers. Uses of such polymers and copolymers for the production of contact lenses, intraocular lenses, implants, wound healing slabs, additives for food and cosmetics, conductive plastics, spinnable fibers, and the like are disclosed. E.g., a biopolymer for breast implant was prepared from lysinyl acrylate, serinyl acrylate, and azobisisobutyronitrile.

IT 915980-77-7P

RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(biocompatible polymers and copolymers preparation and medical use)

RN 915980-77-7 HCAPLUS

CN L-Lysine, N2-[(9H-fluoren-9-ylmethoxy)carbonyl]-N6-(1-oxo-2-propen-1-yl)-, polymer with 1,1'-(1,2-ethanediyl) bis(2-methyl-2-propenoate), 2-hydroxyethyl 2-methyl-2-propenoate and methyl 2-methyl-2-propenoate (CA INDEX NAME)

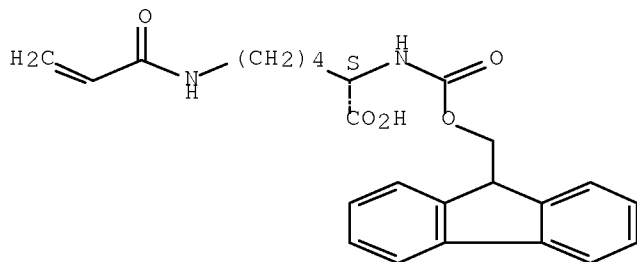
10/588514

CM 1

CRN 894106-43-5

CMF C24 H26 N2 O5

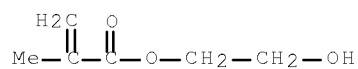
Absolute stereochemistry.



CM 2

CRN 868-77-9

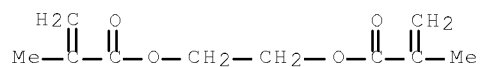
CMF C6 H10 O3



CM 3

CRN 97-90-5

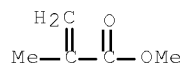
CMF C10 H14 O4



CM 4

CRN 80-62-6

CMF C5 H8 O2



CC 63-8 (Pharmaceuticals)  
Section cross-reference(s): 17, 35, 38, 40, 62

IT Acrylic fibers  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(biocompatible polymers and copolymers preparation and medical use)

IT 25655-01-0, Methyl methacrylate-vinylpyrrolidone copolymer 26355-01-1, Hydroxyethyl methacrylate-methyl methacrylate copolymer 27027-05-0, Methyl methacrylate-glyceryl methacrylate copolymer 29612-57-5, Hydroxyethyl methacrylate-vinylpyrrolidone copolymer  
RL: NUU (Other use, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(biocompatible polymers and copolymers preparation and medical use)

IT 915980-72-2P 915980-74-4P 915980-75-5P 915980-76-6P  
915980-77-7P 915980-78-8P 915980-80-2P  
915980-81-3P  
RL: SPN (Synthetic preparation); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(biocompatible polymers and copolymers preparation and medical use)

IT 48065-82-3P  
RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(biocompatible polymers and copolymers preparation and medical use)

IT 50-02-2, Dexamethasone 124-94-7, Triamcinolone  
RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
(biocompatible polymers and copolymers preparation and medical use)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

L28 ANSWER 2 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:950727 HCAPLUS Full-text

DOCUMENT NUMBER: 145:316747

TITLE: Electrically conductive polymer solution with good conductance for antistatic coatings, optical filters, and adhesives

INVENTOR(S): Yoshida, Kazuyoshi; Ning, Tailu; Masahiro, Yasushi; Abe, Rika; Higuchi, Yutaka

PATENT ASSIGNEE(S): Shin-Etsu Polymer Co., Ltd., Japan

SOURCE: PCT Int. Appl., 73 pp.  
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006095595	A1	20060914	WO 2006-JP303636	20060227 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,				

## 10/588514

GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
KG, KZ, MD, RU, TJ, TM

JP 2006249302	A	20060921	JP 2005-68935	20050311 <--
JP 2006249303	A	20060921	JP 2005-68936	20050311 <--
JP 2006321840	A	20061130	JP 2005-144030	20050517 <--
JP 2007051173	A	20070301	JP 2005-235208	20050815 <--
EP 1857504	A1	20071121	EP 2006-714773	20060227 <--
R: DE				
US 20060202171	A1	20060914	US 2006-372444	20060309 <--
CN 101137718	A	20080305	CN 2006-80007304	20070906 <--
KR 2007120126	A	20071221	KR 2007-723013	20071009 <--
KR 910435	B1	20090804		

PRIORITY APPLN. INFO.:

JP 2005-68935	A	20050311 <--
JP 2005-68936	A	20050311 <--
JP 2005-144030	A	20050517 <--
JP 2005-235208	A	20050815 <--
WO 2006-JP303636	W	20060227

AB Title conductive polymer solution comprising a  $\pi$ -conjugated conductive polymer, a solubilizing polymer, a phase-transfer catalyst, and an organic solvent is prepared by adding an organic solvent to an aqueous polymer solution obtained by dissolving the  $\pi$ -conjugated conductive polymer and the solubilizing polymer in water and adding the phase-transfer catalyst thereto or adding the phase-transfer catalyst to an aqueous polymer solution obtained by dissolving the  $\pi$ -conjugated conductive polymer and the solubilizing polymer in water, precipitating a mixture, and adding an organic solvent to the mixture. Thus, 1.5% an aqueous polystyrenesulfonic acid-doped poly(3,4-ethylenedioxythiophene) solution 200, acetone 200, and toluene 200 mL were mixed, 3.2 g 1-dodecyl-2-methyl-3-benzylimidazolium chloride was added therein, and removed an aqueous phase to give a conductive solution, which was applied on a glass substrate to give a coating, showing surface resistance  $2 + 104 \Omega$ .

IT 909111-35-9DEF, reaction products with Me chloride

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(crosslinked, binder for coating; elec. conductive polymer solution for antistatic coating materials and optical films and adhesives)

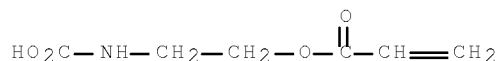
RN 909111-35-9 HCAPLUS

CN 2-Propenamide, N-(2-hydroxyethyl)-, polymer with  
N-(hydroxymethyl)-2-propenamide, [2-[(1-oxo-2-propenyl)oxy]ethyl]carbamate (ester) (9CI) (CA INDEX NAME)

CM 1

CRN 164578-70-5

CMF C6 H9 N O4



CM 2

CRN 85425-59-8

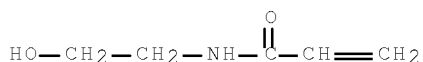
CMF (C5 H9 N O2 . C4 H7 N O2)x

CCI PMS

CM 3

CRN 7646-67-5

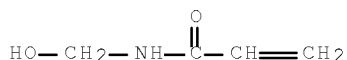
CMF C5 H9 N O2



CM 4

CRN 924-42-5

CMF C4 H7 N O2



CC 42-10 (Coatings, Inks, and Related Products)

Section cross-reference(s): 38, 73, 74, 76

IT 909111-35-9DP, reaction products with Me chloride

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP  
(Properties); TEM (Technical or engineered material use); PREP  
(Preparation); USES (Uses)

(crosslinked, binder for coating; elec. conductive polymer solution for  
antistatic coating materials and optical films and adhesives)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 3 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2006:343496 HCAPLUS Full-text

DOCUMENT NUMBER: 144:392409

TITLE: Surface-treating agents giving good hydrophobicity and  
washability for powders and cosmetics

INVENTOR(S): Nishihama, Shuji; Kaneda, Isamu; Sogabe, Atsushi;  
Osawa, Tomo; Yusa, Shinichi

PATENT ASSIGNEE(S): Shiseido Co., Ltd., Japan

SOURCE: PCT Int. Appl., 77 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2006038668	A1	20060413	WO 2005-JP18521	20051006 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD,				



10/588514

GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KM, KP, KR, KZ, LC,  
LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA,  
NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK,  
SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU,  
ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE,  
IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ,  
CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH,  
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
KG, KZ, MD, RU, TJ, TM

JP 2006131886 A 20060525 JP 2005-270007 20050916 <--  
JP 2006131887 A 20060525 JP 2005-270008 20050916 <--  
AU 2005290511 A1 20060413 AU 2005-290511 20051006 <--  
EP 1803750 A1 20070704 EP 2005-790586 20051006 <--

R: DE, ES, FR, GB, IT

CN 101035819 A 20070912 CN 2005-80033618 20051006 <--  
KR 2007063506 A 20070619 KR 2007-704876 20070228 <--  
US 20080081029 A1 20080403 US 2007-576705 20070412 <--  
IN 2007CN01559 A 20070831 IN 2007-CN1559 20070416 <--

PRIORITY APPLN. INFO.:

JP 2004-294618 A 20041007 <--  
JP 2004-294619 A 20041007 <--  
WO 2005-JP18521 W 20051006 <--

AB Title surface-treating agents comprise a polymer containing a monomer  
CH<sub>2</sub>:C(R<sub>1</sub>)COX<sub>1</sub>R<sub>2</sub>COOM<sub>1</sub>, wherein R<sub>1</sub> = H or C1-3 alkyl; R<sub>2</sub> = C4-22 alkylene; X<sub>1</sub> =  
NH or O; and M<sub>1</sub> = H or monovalent inorg. or organic cation. Thus, sodium N-  
methacryloyl-11-aminoundecanoate was polymerized at 60° for 12 h and acidified  
to give a homopolymer, 45 g of which was mixed with 15 g stearic acid in 500  
mL ethanol, mixed with 240 g titanium oxide, and removed ethanol to give a  
surface-treated powder, showing good water solubility at pH 10.

IT 882176-41-2P

RL: COS (Cosmetic use); IMF (Industrial manufacture); BIOL  
(Biological study); PREP (Preparation); USES (Uses)

(surface-treating agents giving good hydrophobicity and washability for  
powders and cosmetics)

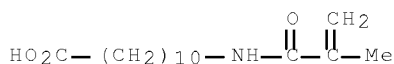
RN 882176-41-2 HCAPLUS

CN Undecanoic acid, 11-[(2-methyl-1-oxo-2-propenyl)amino]-, polymer with  
2-(dimethylamino)ethyl 2-propenoate (9CI) (CA INDEX NAME)

CM 1

CRN 59178-93-7

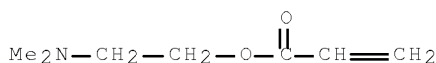
CMF C15 H27 N O3



CM 2

CRN 2439-35-2

CMF C7 H13 N O2



CC 38-3 (Plastics Fabrication and Uses)  
 Section cross-reference(s): 62

IT Polyoxyalkylenes, preparation  
 Polysiloxanes, preparation  
 RL: COS (Cosmetic use); IMF (Industrial manufacture); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (acrylic, graft; surface-treating agents giving good hydrophobicity and  
 washability for powders and cosmetics)

IT Acrylic polymers, preparation  
 RL: COS (Cosmetic use); IMF (Industrial manufacture); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (fluoroalkyl group-containing; surface-treating agents giving good  
 hydrophobicity and washability for powders and cosmetics)

IT Quaternary ammonium compounds, preparation  
 RL: COS (Cosmetic use); IMF (Industrial manufacture); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (polymers; surface-treating agents giving good hydrophobicity and  
 washability for powders and cosmetics)

IT 882176-49-0P 882976-82-1P  
 RL: COS (Cosmetic use); IMF (Industrial manufacture); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (assumed monomers; surface-treating agents giving good hydrophobicity  
 and washability for powders and cosmetics)

IT 34521-92-1P 62839-66-1P 66445-86-1P, N-Methacryloyl-11-aminoundecanoic  
 acid homopolymer 882176-34-3DP, acidified 882176-35-4DP, acidified  
 882176-36-5P 882176-37-6P 882176-38-7P 882176-39-8P 882176-40-1P  
 882176-41-2P 882176-42-3P 882176-43-4P 882176-44-5P  
 882176-45-6P 882176-46-7P 882176-47-8P 882176-50-3P  
 882176-51-4P  
 RL: COS (Cosmetic use); IMF (Industrial manufacture); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)  
 (surface-treating agents giving good hydrophobicity and washability for  
 powders and cosmetics)

IT 882176-35-4P  
 RL: COS (Cosmetic use); IMF (Industrial manufacture); RCT  
 (Reactant); BIOL (Biological study); PREP (Preparation); RACT  
 (Reactant or reagent); USES (Uses)  
 (surface-treating agents giving good hydrophobicity and washability for  
 powders and cosmetics)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
 (4 CITINGS)

REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 4 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:1330522 HCAPLUS Full-text

DOCUMENT NUMBER: 144:71541

TITLE: Stable composite material comprising supported porous  
 gels

INVENTOR(S): Mika, Alicja M.; Wang, Maggie Sanju; Childs, Ronald F.

PATENT ASSIGNEE(S): McMaster University, Can.

SOURCE: PCT Int. Appl., 169 pp.

CODEN: PIXXD2

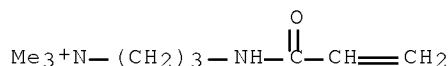
DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

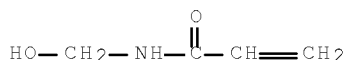
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005120701	A1	20051222	WO 2005-CA880	20050606 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2005251838	A1	20051222	AU 2005-251838	20050606 <--
CA 2564413	A1	20051222	CA 2005-2564413	20050606 <--
EP 1773485	A1	20070418	EP 2005-753128	20050606 <--
R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
JP 2008501808	T	20080124	JP 2007-513639	20050606 <--
IN 2006DN06637	A	20070831	IN 2006-DN6637	20061109 <--
US 20080264867	A1	20081030	US 2008-628805	20080311 <--
PRIORITY APPLN. INFO.:			US 2004-577164P	P 20040607 <--
			WO 2005-CA880	W 20050606 <--
AB	A stable composite material comprises a support member that has a plurality of pores extending through the support member, and a macroporous crosslinked gel that is located in, and fills, the pores of the support member, in which crosslinked gel is entrapped a stabilizing polymer, which stabilizing polymer is neutral, linear or branched, non-crosslinked, and substantially water-insol. but water swellable. The presence of the stabilizing polymer is such that it allows the composite material to largely retain its porosity and morphol. after being dried. The invention also relates to a process for preparing the stable composite material described above, and to its use. The stable composite material is suitable, for example, for separation of substances, for example by filtration or adsorption, including chromatog., for use as a support in synthesis or for use as a support for cell growth.			
IT	749268-99-3F, (3-Acrylamidopropyl)trimethylammonium chloride-N-(hydroxymethyl)acrylamide-N,N'-methylenebisacrylamide copolymer RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses) (stable composite material comprising supported porous gels)			
RN	749268-99-3 HCAPLUS			
CN	1-Propanaminium, N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with N-(hydroxymethyl)-2-propenamide and N,N'-methylenebis[2-propenamide] (9CI) (CA INDEX NAME)			
CM	1			
CRN	45021-77-0			
CMF	C9 H19 N2 O . Cl			



CM 2

CRN 924-42-5

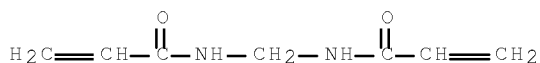
CMF C4 H7 N O2



CM 3

CRN 110-26-9

CMF C7 H10 N2 O2



- IC ICM B01J020-28  
ICS G01N030-48; G01N030-52; C08J003-02; B01J020-30; B01J032-00;  
B01D015-08; B01D037-02
- CC 47-2 (Apparatus and Plant Equipment)  
Section cross-reference(s): 38, 48
- IT Antibodies and Immunoglobulins  
RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
(IgG, human; stable composite material comprising supported porous gels)
- IT Albumins, processes  
RL: PEP (Physical, engineering or chemical process); PUR (Purification or recovery); PYP (Physical process); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); PROC (Process); USES (Uses)  
(serum, human; stable composite material comprising supported porous gels)
- IT 25034-58-6P, Acrylamide-N,N'-methylenebisacrylamide copolymer  
29299-74-9P, Diallyldimethylammonium chloride-N,N'-methylenebisacrylamide copolymer  
29856-78-8P, Ethylene glycol diacrylate-glycidyl methacrylate copolymer  
30421-16-0P, Methacrylic acid-N,N'-methylenebisacrylamide copolymer  
31921-44-5P, Acrylamide-diallyldimethylammonium chloride-N,N'-methylenebisacrylamide copolymer  
51838-34-7P, Acrylic acid-Trimethylolpropane triacrylate copolymer  
70144-13-7P, Acrylamide-2-acrylamido-2-methyl-1-propanesulfonic acid-N,N'-methylenebisacrylamide copolymer  
86469-75-2P, N-Vinylpyrrolidone-Trimethylolpropane triacrylate copolymer  
87245-04-3P, 124924-40-9P, 2-Acrylamido-2-methyl-1-propanesulfonic acid-N,N'-methylenebisacrylamide copolymer  
136837-49-5P, Ethyleneimine-ethyleneglycol diglycidyl ether copolymer  
198343-03-2DP, partially neutralized  
207558-34-7P, Ethyleneglycol diglycidyl

10/588514

ether-ethyleneimine-poly(ethylene glycol) copolymer 749269-99-3P  
 , (3-Acrylamidopropyl)trimethylammonium  
 chloride-N-(hydroxymethyl)acrylamide-N,N'-methylenebisacrylamide copolymer  
 749269-09-8P, (3-Acrylamidopropyl)trimethylammonium  
 chloride-diallyldimethylammonium chloride-N,N'-methylenebisacrylamide  
 copolymer 749269-10-1P, Acrylamide-(3-acrylamidopropyl)trimethylammonium  
 chloride-diallyldimethylammonium chloride-N,N'-methylenebisacrylamide  
 copolymer 749269-13-4P, Acrylamide-acrylic acid-trimethylolpropane  
 triacrylate copolymer 867198-16-1P  
 RL: PRP (Properties); SPN (Synthetic preparation); TEM (Technical or  
 engineered material use); PREP (Preparation); USES (Uses)

(stable composite material comprising supported porous gels)

REFERENCE COUNT: 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 5 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:823747 HCAPLUS Full-text

DOCUMENT NUMBER: 143:230961

TITLE: ~~Water-soluble~~ resins for cosmetic  
 hair preparation and silicone oil adsorption aids

INVENTOR(S): Yoda, Shoya; Hiwatashi, Tomoaki; Yoda, Yuko

PATENT ASSIGNEE(S): Mitsubishi Chemical Corporation, Japan

SOURCE: PCT Int. Appl., 32 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005075528	A1	20050818	WO 2005-JP2367	20050209 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
JP 2005255982	A	20050922	JP 2005-16988	20050125 <--
EP 1719785	A1	20061108	EP 2005-710267	20050209 <--
R: DE				
CN 1918203	A	20070221	CN 2005-80004427	20050209 <--
CN 100420703	C	20080924		
KR 2007004618	A	20070109	KR 2006-715669	20060802 <--
US 20070167593	A1	20070719	US 2006-588514	20061117 <--
PRIORITY APPLN. INFO.:			JP 2004-32203	A 20040209 <--
			JP 2005-16988	A 20050125 <--
			WO 2005-JP2367	W 20050209 <--

AB Title ~~water-soluble~~ resins comprising a vinyl monomer having hydroxy and an  
 amide bond and a vinyl monomer having a cationic group produce a conditioning  
 effect when used for cosmetic hair preparation containing an anionic  
 surfactant. Thus, 20 parts 2-methacryloyloxyethyltrimethylammonium chloride  
 and 80 parts 2-hydroxyethylacrylamide were polymerized to give a copolymer  
 with weight average mol. weight 450,000 and good solubility in water (5% and  
 20%), 0.3% of which was mixed with sodium polyethylene glycol lauryl ether

# 10/588514

sulfate 10, lauroylamidopropylbetaine 5, BY 22029 (silicone oil) 2, Marcoat 550 0.5, and Arquad T 28 1%, and balance water to give a shampoo, showing good foamability, smoothness, rustling feeling, and flexibility after drying, and silicone adsorption amount 500 ppm.

IT 862587-05-1P

RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM (Technical or engineered material use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(water-soluble resins for cosmetic hair preparation and silicone oil adsorption aids)

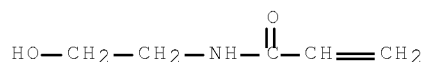
RN 862587-05-1 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propen-1-yl)oxy]-, chloride (1:1), polymer with N-(2-hydroxyethyl)-2-propenamide (CA INDEX NAME)

CM 1

CRN 7646-67-5

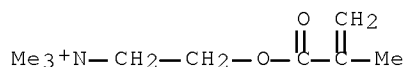
CMF C5 H9 N O2



CM 2

CRN 5039-78-1

CMF C9 H18 N O2 . Cl



● Cl<sup>-</sup>

IC ICM C08F220-52

ICS A61K007-06; A61K007-50

CC 38~3 (Plastics Fabrication and Uses)

Section cross-reference(s): 62

ST water soluble resin cosmetic hair prepn silicone oil adsorption; methacryloyloxyethyltrimethylammonium chloride hydroxyethylacrylamide copolymer shampoo

IT Surfactants

(anionic; water-soluble resins for cosmetic hair preparation and silicone oil adsorption aids)

IT Adsorbents

(silicone oil; water-soluble resins for cosmetic hair preparation and silicone oil adsorption aids)

IT Hair preparations

Shampoos

(water-soluble resins for cosmetic hair preparation and

silicone oil adsorption aids)

IT Polymers, uses  
 RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM  
 (Technical or engineered material use); BIOL (Biological study);  
 PREP (Preparation); USES (Uses)  
 (water-soluble; water-soluble resins  
 for cosmetic hair preparation and silicone oil adsorption aids)

IT 9004-82-4P, Sodium polyethylene glycol lauryl ether sulfate  
 RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM  
 (Technical or engineered material use); BIOL (Biological study);  
 PREP (Preparation); USES (Uses)  
 (anionic surfactant; water-soluble resins for cosmetic  
 hair preparation and silicone oil adsorption aids)

IT 74-79-3DP, L-Arginine, reaction products with glycidyl methacrylate,  
 polymers with hydroxyethylacrylamide 106-91-2DP, Glycidyl methacrylate,  
 reaction products with arginine, polymers with hydroxyethylacrylamide  
 7646-67-5DP, 2-Hydroxyethylacrylamide, polymers with reaction products of  
 arginine and glycidyl methacrylate 112783-16-1P 862587-05-1P  
 862587-06-2P 862587-07-3P 862587-08-4P  
 862587-09-5P 862587-10-8P  
 RL: COS (Cosmetic use); IMF (Industrial manufacture); TEM  
 (Technical or engineered material use); BIOL (Biological study);  
 PREP (Preparation); USES (Uses)  
 (water-soluble resins for cosmetic hair preparation and  
 silicone oil adsorption aids)

REFERENCE COUNT: 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 6 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2005:275705 HCAPLUS Full-text  
 DOCUMENT NUMBER: 142:332476  
 TITLE: Stimulus-responsive polymer-bonded magnetic fine  
 particles, their manufacture, their use as adsorbents,  
 and separation of proteins using them  
 INVENTOR(S): Onishi, Noriyuki; Hata, Hideyuki; Wang, Ching-Ming;  
 Hasegawa, Masakatsu; Ito, Yoshio; Murase, Katsutoshi;  
 Kondo, Akihiko  
 PATENT ASSIGNEE(S): Chisso Corp., Japan; Meito Sangyo Co., Ltd.  
 SOURCE: Jpn. Kokai Tokkyo Koho, 15 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

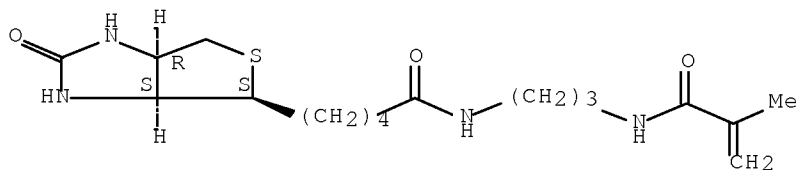
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 2005082538	A	20050331	JP 2003-317374	20030909 <--
PRIORITY APPLN. INFO.:			JP 2003-317374	20030909 <--

AB Title particles, to which stimulus-responsive polymers are fixed via polyols (derivs.), are manufactured by (A) fixing polyols (derivs.) to the surface of the particles or prepare magnetic fine particles in polyols (derivs.), (B) radical polymerization of monomers whose polymers have upper- or lower-critical solution temperature, and removal of the unreacted monomers. The order of the fixation and polymerization may be changed. Thus, N-isopropylacrylamide and N-biotinyl-N'-methacroyltrimethylenamide were polymerized with dextran-fixed magnetic fine particles in water, heated at  $\geq 37^\circ$  for coagulation, and recovered by magnet. The particles were treated with avidin and SP2 antibodies to give adsorbent, by which silkworm SP2 was separated

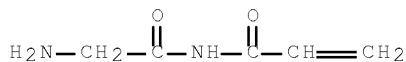
10/588514

IT 848464-98-2P  
RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(manufacture of heat-responsive polymer-bonded magnetic fine particle adsorbents for separation of proteins)  
RN 848464-98-2 HCAPLUS  
CN Dextran, polymer with N-(aminoacetyl)-2-propenamide, (3aS,4S,6aR)-hexahydro-N-[3-[(2-methyl-1-oxo-2-propenyl)amino]propyl]-2-oxo-1H-thieno[3,4-d]imidazole-4-pentanamide and oxiranylmethyl 2-methyl-2-propenoate, graft (9CI) (CA INDEX NAME)  
CM 1  
CRN 173685-06-8  
CMF C17 H28 N4 O3 S

Absolute stereochemistry.



CM 2  
CRN 25717-26-4  
CMF C5 H8 N2 O2

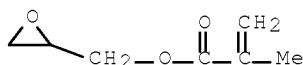


CM 3  
CRN 9004-54-0  
CMF Unspecified  
CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

CM 4  
CRN 106-91-2  
CMF C7 H10 O3





IC ICM C07K017-02  
ICS B01J020-24; B03C001-00; C07K001-22; C12P021-02

CC 9-16 (Biochemical Methods)  
Section cross-reference(s): 38, 77

IT Antibodies and Immunoglobulins  
RL: BUU (Biological use, unclassified); BIOL (Biological study);  
USES (Uses)  
(IgG, biotinated; manufacture of heat-responsive polymer-bonded magnetic fine particle adsorbents for separation of proteins)

IT Agglutinins and Lectins  
Antibodies and Immunoglobulins  
Avidins  
RL: BUU (Biological use, unclassified); BIOL (Biological study);  
USES (Uses)  
(manufacture of heat-responsive polymer-bonded magnetic fine particle adsorbents for separation of proteins)

IT Alcohols, biological studies  
RL: BUU (Biological use, unclassified); BIOL (Biological study);  
USES (Uses)  
(polyhydric; manufacture of heat-responsive polymer-bonded magnetic fine particle adsorbents for separation of proteins)

IT 50-70-4, Sorbitol, biological studies 69-65-8, Mannitol 70-18-8,  
Glutathione, biological studies 9002-89-5, Poly(vinyl alcohol)  
50812-37-8D, Glutathione S transferase, fusion proteins 161544-34-9,  
Carboxydextran  
RL: BUU (Biological use, unclassified); BIOL (Biological study);  
USES (Uses)  
(manufacture of heat-responsive polymer-bonded magnetic fine particle adsorbents for separation of proteins)

IT 848464-97-1P ~~848464-98-2P~~  
RL: BUU (Biological use, unclassified); IMF (Industrial manufacture); PRP (Properties); PUR (Purification or recovery); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(manufacture of heat-responsive polymer-bonded magnetic fine particle adsorbents for separation of proteins)

IT 58-85-5, Biotin  
RL: BUU (Biological use, unclassified); RCT (Reactant); BIOL (Biological study); RACT (Reactant or reagent); USES (Uses)  
(manufacture of heat-responsive polymer-bonded magnetic fine particle adsorbents for separation of proteins)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

L28 ANSWER 7 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:259332 HCAPLUS Full-text

DOCUMENT NUMBER: 142:322376

TITLE: Oral dentifrice compositions comprising cationic polymers

INVENTOR(S): Charmot, Dominique; Gibbs, Christopher David; Kolosov, Oleg; Liu, Mingjun; Nguyen, Son Hoai; Petro, Miroslav; Rannard, Steven Paul

PATENT ASSIGNEE(S): Unilever Home & Personal Care USA, USA

SOURCE: U.S. Pat. Appl. Publ., 6 pp.

10/588514

CODEN: USXXCO

DOCUMENT TYPE:

Patent

LANGUAGE:

English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050063918	A1	20050324	US 2003-665710	20030919 <--
WO 2005027862	A1	20050331	WO 2004-EP9267	20040818 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				

PRIORITY APPLN. INFO.: US 2003-665710 A 20030919 <--  
US 2003-665711 A 20030919 <--  
US 2003-666487 A 20030919 <--  
US 2003-666489 A 20030919 <--

AB Oral care composition containing a polymer obtainable by copolymerizing a mixture of comonomers, in which 40 mol% of the mixture of comonomers is constituted by a comonomer, e.g., H<sub>2</sub>C:CR(X)nY (where R = H or Me, X = divalent organic linking group, n = 0 or 1, and Y is a carboxylate or phosphonate anion), and in which the balance of the mixture of comonomers is constituted by neutral and/or cationic comonomers; the composition being in the form of any one of a toothpaste, gel, foam, chewing gum, deformable strip or mouthwash and being suitable for use in the oral cavity. (ar-vinylbenzyl)trimethylammonium chloride-styrene-N-[tris(hydroxymethyl)methyl]acrylamide copolymer was prepared. Adsorption of the polymer to hydroxyapatite disks and pig tongue was studied.

IT 509085-09-0P  
RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(oral dentifrice compns. comprising cationic polymers)

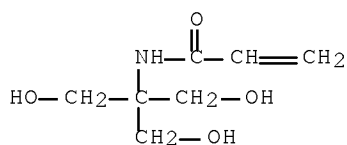
RN 509085-09-0 HCAPLUS

CN 2-Propenoic acid, 2-(dimethylamino)ethyl ester, polymer with N-[2-hydroxy-1,1-bis(hydroxymethyl)ethyl]-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 13880-05-2

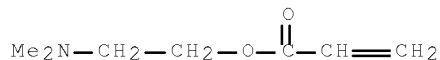
CMF C7 H13 N O4



CM 2

CRN 2439-35-2

CMF C7 H13 N O2



IC ICM A61K009-68

ICS A61K007-16

INCL 424048000; 424049000

CC 62-7 (Essential Oils and Cosmetics)

Section cross-reference(s): 38, 63

IT 9003-39-8P 26022-14-0P 26373-77-3P 26793-34-0P 30347-69-4P  
 73565-50-1P 79431-29-1P 118912-85-9P 138658-02-3P 209862-81-7P  
 324522-33-0P ~~509085-09-0P~~ 723303-09-1P 748794-04-9P  
 848335-22-8P 848335-24-0P 848335-26-2P 848335-28-4P 848335-31-9P  
 848335-35-3P 848335-38-6P 848335-40-0P 848335-43-3P 848335-45-5P  
 848335-47-7P 848335-49-9P 848335-51-3P 848335-54-6P 848335-56-8P  
 848335-58-0P 848335-61-5P 848353-25-3P

RL: COS (Cosmetic use); SPN (Synthetic preparation); BIOL  
 (Biological study); PREP (Preparation); USES (Uses)

(oral dentifrice compns. comprising cationic polymers)

L28 ANSWER 8 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2005:220194 HCAPLUS Full-text

DOCUMENT NUMBER: 142:281229

TITLE: Stabilized polymer beads and their preparation

INVENTOR(S): Leon, Jeffrey W.; Qiao, Tiecheng A.

PATENT ASSIGNEE(S): Eastman Kodak Company, USA

SOURCE: U.S. Pat. Appl. Publ., 12 pp.

CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 20050054815	A1	20050310	US 2003-658009	20030909 <--
US 7163998	B2	20070116		

PRIORITY APPLN. INFO.: US 2003-658009 20030909 &lt;--

AB The polymer particle comprises a polymer bead stabilized by a vinylsulfonyl-functionalized polymer grafted to the surface of the bead. The method of preparing monodisperse polymer particles comprises preparing a homogeneous solution of an ethylenically unsatd. polymerizable monomer (e.g., styrene), an initiator [e.g., 2,2'-azobis(2,4-dimethylvaleronitrile)] and a polymeric stabilizer [e.g., N-[4-[(2-chloroethyl)sulfone]methyl]phenyl]acrylamide-sodium 2-acrylamido-2-methylpropionate copolymer], wherein the polymeric stabilizer consists of repetitive units containing latent vinylsulfonyl moiety; polymerizing the homogeneous solution; and converting the latent vinylsulfonyl moiety to vinylsulfonyl moieties.

IT 847413-33-6DP, dehydrochloride

RL: BUU (Biological use, unclassified); IMF (Industrial manufacture);

BIOL (Biological study); PREP (Preparation); USES (Uses)

10/588514

(polymer beads stabilized by vinylsulfonyl-functionalized polymers grafted to the surface of the beads)

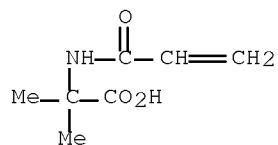
RN 847413-33-6 HCAPLUS

CN Alanine, 2-methyl-N-(1-oxo-2-propenyl)-, monosodium salt, polymer with N-[[[3-[(2-chloroethyl)sulfonyl]-1-oxopropyl]amino]methyl]-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 116000-31-8

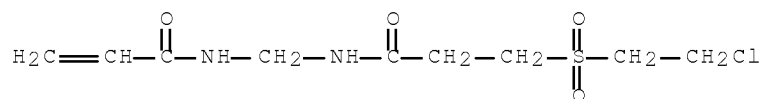
CMF C7 H11 N O3 . Na



CM 2

CRN 85899-15-6

CMF C9 H15 Cl N2 O4 S



IC ICM C08G075-00

INCL 528373000

CC 38~3 (Plastics Fabrication and Uses)

Section cross-reference(s): 9

IT Antibodies and Immunoglobulins

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(IgG, IgG; polymer beads stabilized by vinylsulfonyl-functionalized polymers grafted to the surface of the beads)

IT Antibodies and Immunoglobulins

Antigens

Enzymes, biological studies

Nucleic acids

Oligonucleotides

Peptide nucleic acids

Peptides, biological studies

Polysaccharides, biological studies

Proteins

RL: BSU (Biological study, unclassified); BIOL (Biological study)

(bioaffinity tag; polymer beads stabilized by

vinylsulfonyl-functionalized polymers grafted to the surface of the beads)

IT 79-10-7D, Acrylic acid, esters, polymers 79-41-4D, Methacrylic acid, esters, polymers  
 RL: BUU (Biological use, unclassified); BIOL (Biological study);  
 USES (Uses)  
 (beads; polymer beads stabilized by vinylsulfonyl-functionalized polymers grafted to the surface of the beads)

IT 9003-53-6P, Polystyrene 9011-14-7P, Poly(methyl methacrylate)  
 RL: BUU (Biological use, unclassified); IMF (Industrial manufacture);  
 BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (beads; polymer beads stabilized by vinylsulfonyl-functionalized polymers grafted to the surface of the beads)

IT 847413-32-5DP, dehydrochloride 847413-33-6DP, dehydrochloride  
 RL: BUU (Biological use, unclassified); IMF (Industrial manufacture);  
 BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (polymer beads stabilized by vinylsulfonyl-functionalized polymers grafted to the surface of the beads)

IT 847413-32-5P 847413-33-6P  
 RL: IMF (Industrial manufacture); RCT (Reactant); PREP (Preparation); RACT (Reactant or reagent)  
 (polymeric stabilizer; polymer beads stabilized by vinylsulfonyl-functionalized polymers grafted to the surface of the beads)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 9 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:957244 HCAPLUS Full-text

DOCUMENT NUMBER: 141:386436

TITLE: Ink-jet printing sheet containing block copolymer

INVENTOR(S): Yoshimura, Kosaku; Nagata, Kozo

PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 45 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

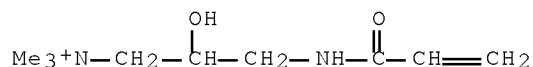
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2004314474	A	20041111	JP 2003-112628	20030417 <--
PRIORITY APPLN. INFO.:			JP 2003-112628	20030417 <--
AB	The sheet comprises a support coated with an ink receiving layer containing block copolymer having <del>water-soluble</del> block and cationic block. The sheet shows good ink absorption, and gives high d. and resolution images with good storage stability.			
IT	784153-11-3P, N-[3-(Acryloylamino)-2-hydroxypropyl]-N,N,N-trimethylammonium chloride-vinyl alcohol block copolymer			
	RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)			
	(ink-jet printing sheet containing block copolymer having cationic and <del>water-soluble</del> blocks)			
RN	784153-11-3 HCAPLUS			
CN	1-Propanaminium, 2-hydroxy-N,N,N-trimethyl-3-[(1-oxo-2-propenyl)amino]-, chloride, polymer with ethenol, block (9CI) (CA INDEX NAME)			

CM 1

CRN 475671-58-0

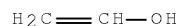
CMF C9 H19 N2 O2 . Cl



CM 2

CRN 557-75-5

CMF C2 H4 O



- IC ICM B41M005-00  
ICS B41J002-01
- CC 74-6 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)  
Section cross-reference(s): 38
- ST ink jet printing sheet block copolymer; water soluble group cationic block copolymer
- IT Gelatins, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(binder; ink-jet printing sheet containing block copolymer having cationic and water-soluble blocks)
- IT Ink-jet recording sheets  
(ink-jet printing sheet containing block copolymer having cationic and water-soluble blocks)
- IT 9004-34-6, Cellulose, uses 496064-50-7, Boric acid-Poval PVA 235 copolymer  
RL: TEM (Technical or engineered material use); USES (Uses)  
(binder; ink-jet printing sheet containing block copolymer having cationic and water-soluble blocks)
- IT 7631-86-9, Silica, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(fumed; ink-jet printing sheet containing block copolymer having cationic and water-soluble blocks)
- IT 183743-55-7P, N-[2-(Methacryloyloxy)ethyl]-N,N,N-trimethylammonium chloride-vinyl alcohol block copolymer 784153-11-3P, N-[3-(Acryloylamino)-2-hydroxypropyl]-N,N,N-trimethylammonium chloride-vinyl alcohol block copolymer  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(ink-jet printing sheet containing block copolymer having cationic and water-soluble blocks)
- IT 5153-24-2, Zirconyl acetate 30551-89-4, PAA 10C 39659-86-4, Zircosol

AC 7

RL: MOA (Modifier or additive use); TEM (Technical or engineered material use); USES (Uses)

(mordant; ink-jet printing sheet containing block copolymer having cationic and water-soluble blocks)

L28 ANSWER 10 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2004:391353 HCAPLUS Full-text

DOCUMENT NUMBER: 140:376284

TITLE: Biodegradable and deodorant water-absorbing compositions and their manufacture

INVENTOR(S): Hirayama, Kazuko; Nikami, Makoto; Nagaoka, Shoji; Nagira, Kazuhiko

PATENT ASSIGNEE(S): Ehime Prefecture, Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
JP 2004137382	A	20040513	JP 2002-303813	20021018 <--
PRIORITY APPLN. INFO.:			JP 2002-303813	20021018 <--

AB The compns., useful for disposable diapers, food packaging materials, agricultural materials, etc., comprise crosslinked products of CO<sub>2</sub>H-containing water-soluble cellulose derivs. and 5-15% polymers manufactured from lysine(meth)acrylamide, ornithine(meth)acrylamide, and/or 2-methacryloyloxyethylphosphorylcholine. Thus, a solution containing lysineacrylamide, methylenebisacrylamide, (NH<sub>4</sub>)<sub>2</sub>S<sub>2</sub>O<sub>8</sub>, Cellogen WS-A, TEMED, and epichlorohydrin was heated at 40° for 4 h to give a hydrogel, which was treated with NaOH in MeOH and dried to give a powder composition showing good absorption of urine.

IT 683745-92-8P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(biodegradable and deodorant water absorbents comprising crosslinked celluloses and amide or ammonium polymers)

RN 683745-92-8 HCAPLUS

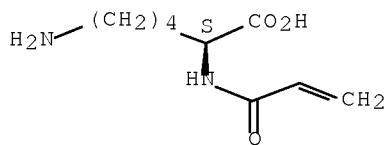
CN L-Lysine, N<sub>2</sub>-(1-oxo-2-propenyl)-, polymer with N,N'-methylenebis[2-propenamide] (9CI) (CA INDEX NAME)

CM 1

CRN 288325-11-1

CMF C9 H16 N2 O3

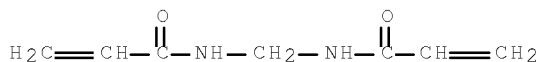
Absolute stereochemistry.



CM 2

CRN 110-26-9

CMF C7 H10 N2 O2



IC ICM C08F251-02

CC 38~3 (Plastics Fabrication and Uses)

Section cross-reference(s): 63

ST water absorbent biodegradable deodorant crosslinked carboxy cellulose; lysineacrylamide polymer urine absorbent crosslinked cellulose; ornithineacrylamide polymer water absorbent disposable diaper; phosphorylcholine polymer water absorbent biodegradable deodorant

IT Absorbents

Biodegradable materials

Deodorants

Disposable diapers

(biodegradable and deodorant water absorbents comprising crosslinked celluloses and amide or ammonium polymers)

IT 67017-81-6P, Cellogen WS-A-epichlorohydrin copolymer  
683745-92-8P

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(biodegradable and deodorant water absorbents comprising crosslinked celluloses and amide or ammonium polymers)

IT 288325-12-2

RL: POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); USES (Uses)

(biodegradable and deodorant water absorbents comprising crosslinked celluloses and amide or ammonium polymers)

L28 ANSWER 11 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2003:277591 HCAPLUS Full-text

DOCUMENT NUMBER: 139:53690

TITLE: Temperature and pH-dependent swelling behavior of poly(N-isopropylacrylamide) copolymer hydrogels and their use in flow control

AUTHOR(S): Kuckling, Dirk; Richter, Andreas; Arndt, Karl-Friedrich

CORPORATE SOURCE: Inst. for Macromol. Chem. and Textile Chem., Dresden Univ. of Technol., Dresden, D-01062, Germany

SOURCE: Macromolecular Materials and Engineering (2003), 288(2), 144-151

CODEN: MMENFA; ISSN: 1438-7492

PUBLISHER: Wiley-VCH Verlag GmbH &amp; Co. KGaA

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Methylenebisacrylamide-crosslinked N-isopropylacrylamide NIPAAm copolymer gels with acidic and basic comonomers of various molar ratios were prepared by radical polymerization. The relationship between the swelling behavior (weight of absorbed water) of the gels and the comonomer ratio was studied exptl. at

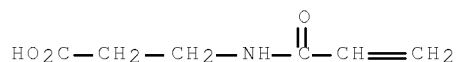


different temps. and in various pH value buffer solns. The results of the expts. revealed that the transition temps. of the NIPAAm copolymer gels were changed in proportion to the monomer ratio used in copolymn. The pH value of the buffer solution strongly affected the swelling ratio and some of the transition temps. of the gels. The NIPAAm copolymer gels were used in a chemomech. valve. The liquid flows directly through a gel actuator, which consists of a cylindrical actuator chamber filled with small particles of the sensitive crosslinked polymer. The flow rate as well as the pressure drop was measured in dependence on the solvent properties. With the presented exptl. arrangement it could be shown that sensitive polymers can be used for controlling the flow in dependence on temperature and pH.

IT 545375-93-7P, 3-Acrylamidopropionic  
acid-N-isopropylacrylamide-methylenebisacrylamide copolymer  
RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(temperature- and pH-dependent behavior of isopropylacrylamide copolymer  
hydrogels and their use in flow control)  
RN 545375-93-7 HCAPLUS  
CN  $\beta$ -Alanine, N-(1-oxo-2-propenyl)-, polymer with  
N,N'-methylenebis[2-propenamide] and N-(1-methylethyl)-2-propenamide (9CI)  
(CA INDEX NAME)

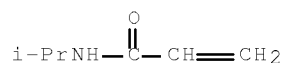
CM 1

CRN 16753-07-4  
CMF C6 H9 N O3



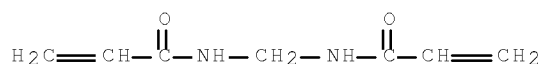
CM 2

CRN 2210-25-5  
CMF C6 H11 N O



CM 3

CRN 110-26-9  
CMF C7 H10 N2 O2



CC 37-5 (Plastics Manufacture and Processing)  
 Section cross-reference(s): 38

IT 90398-43-9P, N-Isopropylacrylamide-methylenebisacrylamide copolymer  
~~545375-93-7P~~, 3-Acrylamidopropionic  
 acid-N-isopropylacrylamide-methylenebisacrylamide copolymer  
 545375-94-8P, N-[2-(Dimethylamino)ethyl]acrylamide-N-isopropylacrylamide-  
 methylenebisacrylamide copolymer ~~545375-95-9P~~,  
 6-Acrylamidohexanoic acid-N-isopropylacrylamide-methylenebisacrylamide  
 copolymer ~~545375-96-0P~~, 11-Acrylamidoundecanoic  
 acid-N-isopropylacrylamide-methylenebisacrylamide copolymer  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (temperature- and pH-dependent behavior of isopropylacrylamide copolymer  
 hydrogels and their use in flow control)

OS.CITING REF COUNT: 29 THERE ARE 29 CAPLUS RECORDS THAT CITE THIS  
 RECORD (29 CITINGS)

REFERENCE COUNT: 29 THERE ARE 29 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 12 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:504827 HCAPLUS Full-text

DOCUMENT NUMBER: 137:68243

TITLE: A process for cross-linking acrylic polymer

INVENTOR(S): Balestrieri, Gerardo; Protopapa, Carmelo

PATENT ASSIGNEE(S): Polmekon S.r.l., Italy

SOURCE: PCT Int. Appl., 14 pp.  
 CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002051888	A1	20020704	WO 2001-IB2721	20011224 <--
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
IT 2000BO0745	A1	20020627	IT 2000-BO745	20001227 <--
AU 2002222426	A1	20020708	AU 2002-222426	20011224 <--
BR 2001016143	A	20031021	BR 2001-16143	20011224 <--
EP 1353964	A1	20031022	EP 2001-272221	20011224 <--
EP 1353964	B1	20070718		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
AT 367407	T	20070815	AT 2001-272221	20011224 <--
ES 2290096	T3	20080216	ES 2001-272221	20011224 <--
US 20030171509	A1	20030911	US 2002-275252	20021107 <--
US 6770711	B2	20040803		
US 20040209997	A1	20041021	US 2004-842564	20040511 <--
PRIORITY APPLN. INFO.:				
			IT 2000-BO745	A 20001227 <--
			WO 2001-IB2721	W 20011224 <--
			US 2002-275252	A1 20021107 <--
AB	A process for preparing a cross-linked acrylic polymer from water- soluble acrylamide monomers comprises the following steps: preparing an aqueous			

# 10/588514

polymerizing solution comprising the acrylamide monomer and catalyzing agents; polymerizing the monomers present in the polymerizing solution by agitating and heating the polymerizing solution in the presence of gaseous oxygen to obtain a cross-linked acrylic polymer useful as a filling material in cosmetic and reconstructive plastic surgery.

IT 439867-02-4DP, cross-linked via oxygen

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(crosslinking of acrylic polymer)

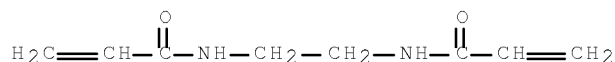
RN 439867-02-4 HCAPLUS

CN 2-Propenamide, N,N'-1,2-ethanediylbis-, polymer with  
N-(hydroxymethyl)-2-propenamide and N,N'-methylenebis[2-propenamide] (9CI)  
(CA INDEX NAME)

CM 1

CRN 2956-58-3

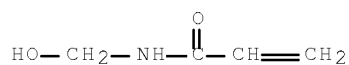
CMF C8 H12 N2 O2



CM 2

CRN 924-42-5

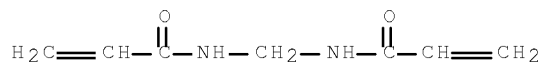
CMF C4 H7 N O2



CM 3

CRN 110-26-9

CMF C7 H10 N2 O2



IC ICM C08F020-00

ICS C08F008-00

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 38

IT 31132-41-9DP, Acrylamide-N,N'-ethylenebisacrylamide copolymer,  
cross-linked via oxygen 439867-02-4DP, cross-linked via oxygen

RL: IMF (Industrial manufacture); POF (Polymer in formulation); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(crosslinking of acrylic polymer)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (1 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 13 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2002:275116 HCAPLUS Full-text

DOCUMENT NUMBER: 137:48103

TITLE: Preparation of self-organized micro-patterned polymer films having cell adhesive ligands

AUTHOR(S): Nishida, Jin; Nishikawa, Kazutaka; Nishimura, Shin-Ichiro; Wada, Shigeo; Karino, Takeshi; Nishikawa, Takehiro; Ijiro, Kuniharu; Shimomura, Masatsugu

CORPORATE SOURCE: Research Institute for Electronic Science, Hokkaido University, Sapporo, 060-0812, Japan

SOURCE: Polymer Journal (Tokyo, Japan) (2002), 34(3), 166-174

CODEN: POLJB8; ISSN: 0032-3896

PUBLISHER: Society of Polymer Science, Japan

DOCUMENT TYPE: Journal

LANGUAGE: English

AB This article describes novel three methods for micro-patterning of cell adhesive ligands by using the self-organized honeycomb-patterned structure formed by the simple cast method. A first method is a direct preparation of a patterned film by casting an amphiphilic polymer containing lactose residue which is one of cell adhesive ligands. A benzene solution of the amphiphilic polymer was cast at high humidity on a glass substrate. Atomic force microscopy (AFM) observation of the film showed that a honeycomb pattern with micropores as large as micrometer size in diameter was formed. The film was immersed into an aqueous fluorescence-labeled lectin solution to investigate the distribution of lactoses on the patterned film. Consistence of a fluorescence image of the lectin bound film with the honeycomb pattern showed that the lactose residues were existed not at the holes but at the rims of the honeycomb-patterned film. A second method is to immobilize gelatin, which is one also one of cell adhesive ligands, on the honeycomb-patterned film by chemical reaction. A honeycomb-patterned film was prepared from chloroform solution of an amphiphilic polymer containing reactive succinimide ester groups, and then the film was immersed into an aqueous fluorescence-labeled gelatin solution to introduce gelatin on the film surface. Immobilization of gelatin onto honeycomb-patterned film was confirmed by the fluorescence microscope. A third method is another way to introduce gelatin onto the honeycomb film by the specific avidin-biotin interaction. A honeycomb-patterned film was prepared from amphiphilic polymer containing biotin residues and dodecyl groups, and then the film was immersed into a avidin solution and a biotinylated fluorescence labeled gelatin solution successively. By the fluorescence microscopic observation of the film, gelatin was confirmed to be immobilized at the rims of the honeycomb pattern via the avidin-biotin interaction. Cell culture was performed on the gelatin immobilized patterned film prepared by second method. Bioactivity of gelatin immobilized honeycomb-patterned film was confirmed by adhesion of cell onto the film.

IT 256239-34-6P

RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(methods for preparation of self-organized micro-patterned polymer films having cell adhesive ligands and their structural characteristics and

bioactivities)

RN 256239-34-6 HCAPLUS

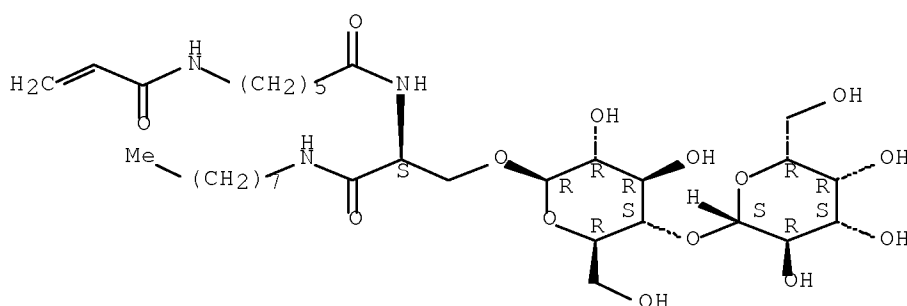
CN Hexanamide, N-[(1S)-1-[[[(4-O-β-D-galactopyranosyl-β-D-glucopyranosyl)oxy]methyl]-2-(octylamino)-2-oxoethyl]-6-[(1-oxo-2-propenyl)amino]-, polymer with N-dodecyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 196705-76-7

CMF C32 H57 N3 O14

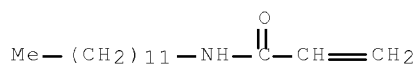
Absolute stereochemistry. Rotation (+).



CM 2

CRN 1506-53-2

CMF C15 H29 N O



CC 38~3 (Plastics Fabrication and Uses)  
Section cross-reference(s): 6, 35, 37

IT Ligands

RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(methods for preparation of self-organized micro-patterned polymer films having cell adhesive ligands and their structural characteristics and bioactivities)

IT Gelatins, properties

RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(reaction products, with biotin derivs.; methods for preparation of self-organized micro-patterned polymer films having cell adhesive ligands and their structural characteristics and bioactivities)

IT 27072-45-3DP, Fluorescein isothiocyanate, reaction products with gelatin  
RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)  
(from Erythrina crista-galli; methods for preparation of self-organized

micro-patterned polymer films having cell adhesive ligands and their structural characteristics and bioactivities)

IT 66640-86-6DP, reaction products with  
N-dodecylacrylamide-N-hydroxysuccinimidyl 6-acrylamidohexanoate copolymer  
72040-63-2DP, reaction products with gelatin 256239-34-6P  
258337-40-5P, 6-Acrylamidohexanoic acid-N-dodecylacrylamide copolymer  
438544-69-5DP, reaction products with biotin derivs. 438544-69-5P,  
N-Dodecylacrylamide-N-hydroxysuccinimidyl 6-acrylamidohexanoate copolymer  
RL: BSU (Biological study, unclassified); PRP (Properties); SPN (Synthetic  
preparation); BTOL (Biological study); PREP (Preparation)  
(methods for preparation of self-organized micro-patterned polymer films  
having cell adhesive ligands and their structural characteristics and  
bioactivities)

OS.CITING REF COUNT: 22 THERE ARE 22 CAPLUS RECORDS THAT CITE THIS  
RECORD (22 CITINGS)  
REFERENCE COUNT: 34 THERE ARE 34 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 14 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2001:589954 HCAPLUS Full-text

DOCUMENT NUMBER: 136:217410

TITLE: Synthesis and water absorbency of high  
water-absorbing poly(potassium

acrylate-acrylamide-N-hydroxymethylacrylamide)  
AUTHOR(S): Li, Shao-ying; Yao, Xue-jun; Xu, Yong-quan; Fu,  
Zhao-xia; Zhang, Bing-zhu

CORPORATE SOURCE: College of Material Science and Engineering, Hebei  
University of Science and Technology, Hebei, 050018,  
Peop. Rep. China

SOURCE: Hebei Keji Daxue Xuebao (2001), 22(2), 8-11  
CODEN: HKDXFY; ISSN: 1008-1542

PUBLISHER: Hebei Keji Daxue Xuebao Bianjibu

DOCUMENT TYPE: Journal

LANGUAGE: Chinese

AB A series of high water-absorbing resins have been prepared by inverse  
suspension copolymn. using N,N'-methylene-bisacrylamide as the crosslinking  
agent, potassium persulfate as initiator and cyclohexane as the continuous  
phase. The absorption capacity of the resin synthesized is more than 800 g/g  
and 100 g/g in case of deionizing water and 0.9% NaCl solution, resp. The  
study also includes the effect of the composition of the copolymers on  
properties of absorption, the amount of initiator agent used, neutralization  
value of the acrylic acid and dispersion stabilizers. The optimum  
prescription is presented.

IT 396733-76-9P

RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
(synthesis and properties of high water-absorbing  
poly(potassium acrylate-acrylamide-N-hydroxymethylacrylamide))

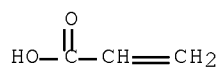
RN 396733-76-9 HCAPLUS

CN 2-Propenoic acid, potassium salt, polymer with  
N-(hydroxymethyl)-2-propenamide, N,N'-methylenebis[2-propenamide] and  
2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 10192-85-5

CMF C3 H4 O2 . K

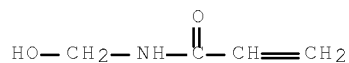


● K

CM 2

CRN 924-42-5

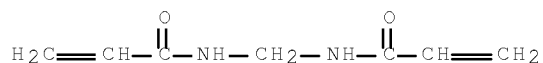
CMF C4 H7 N O2



CM 3

CRN 110-26-9

CMF C7 H10 N2 O2



CM 4

CRN 79-06-1

CMF C3 H5 N O



CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 38

ST potassium acrylamide copolymer water absorption; acrylamide copolymer water absorption; hydroxymethylacrylamide copolymer water absorption; methylene bisacrylamide copolymer water absorption; inverse suspension polymn water absorbent prepn

IT Dispersing agents

Neutralization

Surfactants

(effect on synthesis and properties of high water-absorbing poly(potassium acrylate-acrylamide-N-hydroxymethylacrylamide))

IT Polymerization catalysts  
 (inverse suspension; effect on synthesis and properties of high water-  
 absorbing poly(potassium  
 acrylate-acrylamide-N-hydroxymethylacrylamide))

IT Polymerization  
 (inverse suspension; synthesis and properties of high water-  
 absorbing poly(potassium  
 acrylate-acrylamide-N-hydroxymethylacrylamide))

IT Bentonite, uses  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (surfactant effect on synthesis and properties of high water-  
 absorbing poly(potassium  
 acrylate-acrylamide-N-hydroxymethylacrylamide))

IT Absorption  
 Superabsorbents  
 (synthesis and properties of high water-absorbing  
 poly(potassium acrylate-acrylamide-N-hydroxymethylacrylamide))

IT 7732-18-5, Water, processes  
 RL: PEP (Physical, engineering or chemical process); PYP (Physical  
 process); PROC (Process)  
 (absorption; synthesis and properties of high water-absorbing  
 poly(potassium acrylate-acrylamide-N-hydroxymethylacrylamide))

IT 7727-21-1, Potassium persulfate  
 RL: CAT (Catalyst use); USES (Uses)  
 (initiator; effect on synthesis and properties of high water-  
 absorbing poly(potassium  
 acrylate-acrylamide-N-hydroxymethylacrylamide))

IT 126-92-1, Sodium octylsulfate 1338-41-6, Span 60 9005-65-6, Tween 80  
 25322-68-3 26266-58-0, Span 85 51811-79-1  
 RL: NUU (Other use, unclassified); USES (Uses)  
 (surfactant effect on synthesis and properties of high water-  
 absorbing poly(potassium  
 acrylate-acrylamide-N-hydroxymethylacrylamide))

IT 396733-76-9P  
 RL: PRP (Properties); SPN (Synthetic preparation); PREP (Preparation)  
 (synthesis and properties of high water-absorbing  
 poly(potassium acrylate-acrylamide-N-hydroxymethylacrylamide))

L28 ANSWER 15 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:790395 HCAPLUS Full-text

DOCUMENT NUMBER: 133:331757

TITLE: Method of synthesis of probes for a gas phase ion  
 spectrometer

INVENTOR(S): Rich, William E.; Um, Pil-je; Voivodov, Kamen; Yip,  
 Tai-tung; Beecher, Jody

PATENT ASSIGNEE(S): CIPHERGEN BIOSYSTEMS, INC., USA

SOURCE: PCT Int. Appl., 60 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
WO 2000066265	A2	20001109	WO 2000-US11452	20000427 <--
WO 2000066265	A3	20010809		
W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR,			
	CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU,			
	ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU,			



## 10/588514

LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE,  
 SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW  
 RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE,  
 DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF,  
 CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

CA 2368247 A1 20001109 CA 2000-2368247 20000427 <--  
 AU 2000046750 A 20001117 AU 2000-46750 20000427 <--  
 AU 774336 B2 20040624  
 EP 1173878 A2 20020123 EP 2000-928521 20000427 <--  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO  
 JP 2003524772 T 20030819 JP 2000-615142 20000427 <--  
 US 6897072 B1 20050524 US 2000-560715 20000427 <--  
 CN 1204592 C 20050601 CN 2000-809424 20000427 <--  
 US 20050090016 A1 20050428 US 2004-960222 20041006 <--  
 US 7205156 B2 20070417  
 US 20070158547 A1 20070712 US 2007-681377 20070302 <--  
 US 7479631 B2 20090120

PRIORITY APPLN. INFO.:  
 US 1999-131652P P 19990429 <--  
 US 2000-560715 A 20000427 <--  
 WO 2000-US11452 W 20000427 <--  
 US 2004-960222 A3 20041006 <--

AB The invention provides a probe and a method of making the probe that is removably insertable into a gas phase ion spectrometer, the probe comprising a substrate having a surface and a hydrogel material on the surface, the hydrogel material comprising binding functionalities for binding with an analyte detectable by the gas phase ion spectrometer. The invention also provides a probe and a method of making the probe that is removably insertable into a gas phase ion spectrometer, the probe comprising a substrate having a surface and a plurality of particles that are uniform in diameter on the surface, the particles comprising binding functionalities for binding with an analyte detectable by the gas phase ion spectrometer. The hydrogel material of the probe consists of a homopolymer, a copolymer, or a blended polymer. Further, the invention provides a system comprising the probe of the present invention and a gas phase ion spectrometer comprising an energy source that directs light to the probe surface to desorb an analyte and a detector in communication with the probe surface that detects the desorbed analyte. The invention also provides a method for desorbing an analyte from a probe surface, the method comprising exposing the binding functionalities to a sample containing an analyte under conditions to allow binding between the analyte and the binding functionalities, and desorbing the analyte from the probe by gas phase ion spectrometry.

IT 159471-47-3P, 2-Acrylamidoglycolic acid-N,N'-methylenebisacrylamide copolymer  
 RL: AGR (Agricultural use); DEV (Device component use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(crosslinked; method of synthesis of probes for a gas phase ion spectrometer)

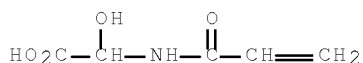
RN 159471-47-3 HCAPLUS

CN Acetic acid, hydroxy[(1-oxo-2-propenyl)amino]-, polymer with N,N'-methylenebis[2-propenamide] (9CI) (CA INDEX NAME)

CM 1

CRN 6737-24-2

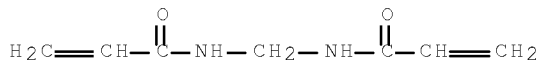
CMF C5 H7 N O4



CM 2

CRN 110-26-9

CMF C7 H10 N2 O2



IC ICM B01L

CC 9-1 (Biochemical Methods)

Section cross-reference(s): 38

IT 130530-88-0P, 3-(Methacryloylamino)propyl trimethylammonium chloride-N,N'-methylenebisacrylamide copolymer 159471-47-3P, 2-Acrylamidoglycolic acid-N,N'-methylenebisacrylamide copolymer 304435-90-3P

RL: AGR (Agricultural use); DEV (Device component use); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(crosslinked; method of synthesis of probes for a gas phase ion spectrometer)

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (8 CITINGS)

REFERENCE COUNT: 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 16 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:731554 HCAPLUS Full-text

DOCUMENT NUMBER: 133:296878

TITLE: Salt-resistant crosslinked acrylamide polymers with high absorption of electrolyte solutions

INVENTOR(S): Sato, Hideo; Kato, Takashi; Mitsuwa, Tetsuharu

PATENT ASSIGNEE(S): Chisso Corp., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000290316	A	20001017	JP 1999-102477	19990409 <--
PRIORITY APPLN. INFO.:			JP 1999-102477	19990409 <--

AB The polymers for civil engineering, horticulture, and medical water absorbents are obtained by polymerization of 5-100% CH<sub>2</sub>:CR<sub>1</sub>CONHCOR<sub>2</sub> (R<sub>1</sub> = H, Me; R<sub>2</sub> = linear, branched, or cyclic (halogenated) C<sub>1</sub>-10 alkyl, alkoxy, alkylamino, Ph) and 0-95% hydrophilic monomers in the presence of crosslinking agents having ≥2 polymerizable unsatd. linkages. Thus, reaction of 5.5 g N-acetylacrylamide

and 4.5 g Na acrylate with 0.05 g N,N'-methylenebisacrylamide in water at 30° for 4 h gave a polymer showing absorption of water and 40% CaCl<sub>2</sub> solution 105% and 24%, resp.

IT 300656-28-4P

RL: AGR (Agricultural use); IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(salt-resistant crosslinked acrylamide polymers for absorbents of electrolyte solns. in wide concentration range)

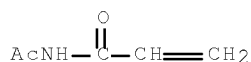
RN 300656-28-4 HCAPLUS

CN 2-Propenamide, N,N'-methylenebis-, polymer with N-acetyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 1432-45-7

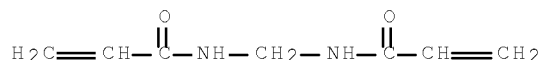
CMF C5 H7 N O2



CM 2

CRN 110-26-9

CMF C7 H10 N2 O2



IC ICM C08F020-56

ICS C08F020-06

CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 19, 38, 58, 63

ST acrylamide polymer salt resistance water absorption; acetylate acrylamide methylenebisacrylamide polymer electrolyte absorbent; engineering gardening medical absorbent acrylamide polymer

IT Absorbents

Medical goods

(salt-resistant crosslinked acrylamide polymers for absorbents of electrolyte solns. in wide concentration range)

IT Soil amendments

(water-retaining; salt-resistant crosslinked acrylamide polymers for absorbents of electrolyte solns. in wide concentration range)

IT Construction materials

(water-stopping agents; salt-resistant crosslinked acrylamide polymers for absorbents of electrolyte solns. in wide concentration range)

IT 300656-28-4P 300656-29-5P 300656-30-8P

RL: AGR (Agricultural use); IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(salt-resistant crosslinked acrylamide polymers for absorbents

of electrolyte solns. in wide concentration range)

L28 ANSWER 17 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 2000:376816 HCAPLUS Full-text  
 DOCUMENT NUMBER: 133:22145  
 TITLE: Viscous hair-styling polymer compositions and  
 hair-styling gels  
 INVENTOR(S): Yamamoto, Hiroshi  
 PATENT ASSIGNEE(S): Gooh Chemical Industry Co., Ltd., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 13 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 2000154124	A	20000606	JP 1999-253044	19990907 <--
PRIORITY APPLN. INFO.:			JP 1998-263631	A 19980917 <--

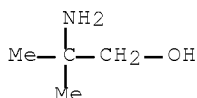
AB The compns., which show good hair-styling effect and are free from flaking after drying, contain (A) copolymers of (a) ethylenically unsatd. monomers having  $\geq 1$  carboxyl group 1-20% (based on total monomers), (b)  $\text{CH}_2\text{CR}1\text{CO}_2(\text{R}2\text{O})_n\text{R}3$  ( $n = 1-10$ ;  $\text{R}1 = \text{H}, \text{Me}$ ;  $\text{R}2 = \text{C}2-4$  linear or branched alkylene;  $\text{R}3 = \text{H}$ , linear or branched alkyl) and/or glycerol mono(meth)acrylate 10-60% (base don total monomers), and (c) ethylenically unsatd. monomers having  $\geq 1$  amino group 0.70-1.30 equiv per carboxyl group of (a) and (B) a gel base, and are neutralized with organic and/or inorg. basic compds. Also claimed are hair-styling gels containing the compns. Methacrylic acid-methoxydiethylene glycol methacrylate-glycerol monomethacrylate-N,N-dimethylaminoethyl methacrylate-Me methacrylate-N-methylolacrylamide copolymer was prepared and neutralized with 2-amino-2-methyl-1-propanol. Carbopol 940 (carboxyvinyl polymer) was swelled with  $\text{H}_2\text{O}$ , gelled by adding EtOH and 2-amino-2-methyl-1-propanol, and mixed with the above neutralized polymer to give a hair-styling gel.

IT ~~272779-62-1P~~  
 RL: BUU (Biological use, unclassified); PNU (Preparation, unclassified); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of acrylate polymers and hair-styling gels containing gel base and the polymers)

RN 272779-62-1 HCAPLUS  
 CN 2-Propenoic acid, 2-methyl-, polymer with  
 N-[3-(dimethylamino)propyl]-2-propenamide, 2-ethoxyethyl  
 2-methyl-2-propenoate, N-(hydroxymethyl)-2-propenamide, methyl  
 2-methyl-2-propenoate and 1,2,3-propanetriol mono(2-methyl-2-propenoate),  
 compd. with 2-amino-2-methyl-1-propanol (9CI) (CA INDEX NAME)

CM 1

CRN 124-68-5  
 CMF C4 H11 N O



CM 2

CRN 272779-61-0

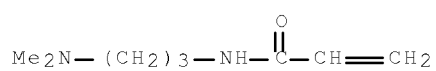
CMF (C8 H16 N2 O . C8 H14 O3 . C7 H12 O4 . C5 H8 O2 . C4 H7 N O2 . C4 H6 O2) x

CCI PMS

CM 3

CRN 3845-76-9

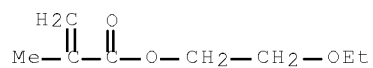
CMF C8 H16 N2 O



CM 4

CRN 2370-63-0

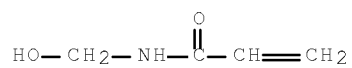
CMF C8 H14 O3



CM 5

CRN 924-42-5

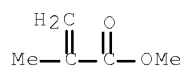
CMF C4 H7 N O2



CM 6

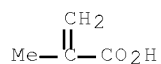
CRN 80-62-6

CMF C5 H8 O2



CM 7

CRN 79-41-4  
 CMF C4 H6 O2

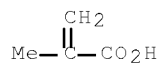


CM 8

CRN 50853-28-6  
 CMF C7 H12 O4  
 CCI IDS

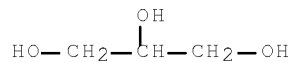
CM 9

CRN 79-41-4  
 CMF C4 H6 O2



CM 10

CRN 56-81-5  
 CMF C3 H8 O3



IC ICM A61K007-11  
 ICS C08L033-04

CC 62-3 (Essential Oils and Cosmetics)  
 Section cross-reference(s): 38

IT Vinyl compounds, biological studies

RL: BUU (Biological use, unclassified); BIOL (Biological study);

USES (Uses)

(carboxy-containing, polymers; preparation of acrylate polymers and hair-styling

gels containing gel base and the polymers)

IT 9000-07-1D, Carrageenan, salts 9000-30-0D, Guar gum, salts 9004-32-4,

Carboxymethyl cellulose 9004-62-0, Hydroxyethyl cellulose 9005-32-7D,  
 Alginic acid, salts 11138-66-2D, Xanthan gum, salts 272779-58-5  
 RL: BUU (Biological use, unclassified); BIOL (Biological study);  
 USES (Uses)

(preparation of acrylate polymers and hair-styling gels containing gel base  
 and  
 the polymers)

IT 272779-60-9P 272779-62-1P 272779-64-3P 272779-66-5P  
 272779-68-7P 272779-70-1P 272779-72-3P 272779-74-5P  
 272779-76-7P 272779-78-9P 272779-80-3P 272779-82-5P 272779-83-6P  
 RL: BUU (Biological use, unclassified); PNU (Preparation, unclassified);  
 BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of acrylate polymers and hair-styling gels containing gel base  
 and  
 the polymers)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
 (1 CITINGS)

L28 ANSWER 18 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 2000:301144 HCAPLUS Full-text

DOCUMENT NUMBER: 132:294793

TITLE: Manufacture of water-absorbing materials in  
 the presence of supercritical fluids

INVENTOR(S): Chen, Mingcai; Hu, Hongqi; Huang, Yuhui; Cong,  
 Guangmin; Liao, Bing

PATENT ASSIGNEE(S): Guangzhou Institute of Chemistry, Chinese Academy of  
 Sciences, Peop. Rep. China

SOURCE: Faming Zhuanli Shenqing Gongkai Shuomingshu, 3 pp.  
 CODEN: CNXXEV

DOCUMENT TYPE: Patent

LANGUAGE: Chinese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
CN 1211585	A	19990324	CN 1998-113171	19980413 <--
CN 1081200	C	20020320		

PRIORITY APPLN. INFO.: CN 1998-113171 19980413 <--

AB Title materials are prepared by polymerizing acrylic acid (I) in a reactor in  
 the presence of an initiator and a crosslinker (polyols or polyfunctional  
 unsatd. compds.) under the supply of supercrit. CO2 (60-70° 130-160 Pa),  
 reacting for 6-8 h, and neutralizing with NaOH-containing alc. solns. Charging  
 I and glycerol into a reactor under N, charging CO2 at 65° and 150 Pa, and  
 stirring for 7 h along with the addition of AIBN gave a white powder, which  
 was neutralized with an EtOH solution containing NaOH to form a crosslinked  
 poly(acrylic acid) Na salt showing water absorption of 200:1.

IT 135772-21-3P, Acrylic acid-dihydroxyethylenebis(acrylamide)  
 copolymer sodium salt

RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or  
 engineered material use); PREP (Preparation); USES (Uses)

(manufacture of crosslinked Na polyacrylate water absorbents in  
 the presence of supercrit. fluids)

RN 135772-21-3 HCAPLUS

CN 2-Propenoic acid, polymer with N,N'-(1,2-dihydroxy-1,2-ethanediyl)bis[2-  
 propenamide], sodium salt (9CI) (CA INDEX NAME)

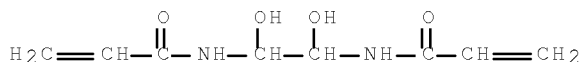
CM 1

CRN 57272-68-1

CMF (C8 H12 N2 O4 . C3 H4 O2)x  
CCI PMS

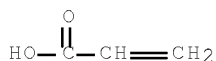
CM 2

CRN 868-63-3  
CMF C8 H12 N2 O4



CM 3

CRN 79-10-7  
CMF C3 H4 O2



- IC ICM C08J003-24  
CC 38-3 (Plastics Fabrication and Uses)  
ST water absorbent sodium polyacrylate manuf supercrit fluid  
IT Polymerization  
Supercritical fluids  
(Manufacture of Na polyacrylate water absorbents in the presence of supercrit. fluids)  
IT Absorbents  
(water; Manufacture of Na polyacrylate water absorbents in the presence of supercrit. fluids)  
IT 78-67-1, AIBN  
RL: CAT (Catalyst use); USES (Uses)  
(manufacture of crosslinked Na polyacrylate water absorbents in the presence of supercrit. fluids)  
IT 116771-14-3P 135772-21-3P, Acrylic acid-dihydroxyethylenebis(acrylamide) copolymer sodium salt  
RL: IMF (Industrial manufacture); PRP (Properties); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(manufacture of crosslinked Na polyacrylate water absorbents in the presence of supercrit. fluids)  
IT 1310-73-2, Sodium hydroxide, reactions  
RL: RCT (Reactant); RACT (Reactant or reagent)  
(manufacture of crosslinked Na polyacrylate water absorbents in the presence of supercrit. fluids)  
IT 124-38-9, Carbon dioxide, uses  
RL: TEM (Technical or engineered material use); USES (Uses)  
(supercrit.; manufacture of crosslinked Na polyacrylate water absorbents in the presence of supercrit. fluids)

L28 ANSWER 19 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 1999:470560 HCAPLUS Full-text  
DOCUMENT NUMBER: 131:248143



10/588514

TITLE: Cogelation of hydrolyzable cross-linkers and poly(ethylene oxide) dimethacrylate and their use as controlled release vehicles

AUTHOR(S): Elisseeff, Jennifer; McIntosh, Winnette; Anseth, Kristi; Langer, Robert

CORPORATE SOURCE: Harvard-MIT Division of Health Sciences and Technology and Department of Chemical Engineering, Massachusetts Institute of Technology, Cambridge, MA, 02139, USA

SOURCE: ACS Symposium Series (1999), 728(Intelligent Materials for Controlled Release), 1-13  
CODEN: ACSMC8; ISSN: 0097-6156

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB Small mol. weight crosslinking agents containing hydrolyzable bonds were photopolymd. with poly(ethylene oxide) in order to decrease the pore size of the gels. The resulting cogels decreased in equilibrium swelling volume (pore size) as the concentration of crosslinker increased. The initial release profile of the model protein albumin showed a decreased burst in the presence of small mol. weight crosslinkers in the photopolymd. hydrogels.

IT 244195-62-8P  
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(cogelation of hydrolyzable cross-linkers and poly(ethylene oxide) dimethacrylate and their use as controlled release vehicles)

RN 244195-62-8 HCAPLUS

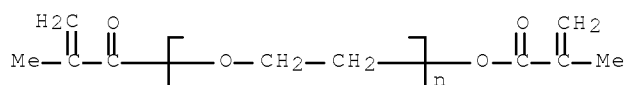
CN 2-Propenamide, N,N'-(1,2-dihydroxy-1,2-ethanediyl)bis-, polymer with  $\alpha$ -(2-methyl-1-oxo-2-propenyl)- $\omega$ -[(2-methyl-1-oxo-2-propenyl)oxy]poly(oxy-1,2-ethanediyl) (9CI) (CA INDEX NAME)

CM 1

CRN 25852-47-5

CMF (C2 H4 O)n C8 H10 O3

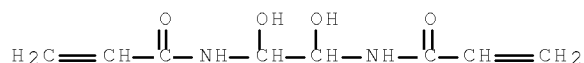
CCI PMS



CM 2

CRN 868-63-3

CMF C8 H12 N2 O4



CC 63-6 (Pharmaceuticals)  
Section cross-reference(s): 38

10/588514

IT 189097-81-2P 244195-61-7P ~~244195-62-8P~~  
RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use);  
BIOL (Biological study); PREP (Preparation); USES (Uses)  
(cogelation of hydrolyzable cross-linkers and poly(ethylene oxide)  
dimethacrylate and their use as controlled release vehicles)  
OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)  
REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 20 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 1999:393004 HCAPLUS Full-text  
DOCUMENT NUMBER: 131:49512  
TITLE: Stimuli-responsive polymer utilizing keto-enol  
tautomerization for pharmaceutical and medical use  
INVENTOR(S): Ohnishi, Noriyuki; Aoshima, Kazumi; Kataoka, Kazunori;  
Ueno, Katsuhiko  
PATENT ASSIGNEE(S): Agency of Industrial Science and Technology MITI,  
Japan; Japan Chemical Innovation Institute  
SOURCE: Eur. Pat. Appl., 35 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
EP 922715	A2	19990616	EP 1998-123058	19981209 <--
EP 922715	A3	20031112		
EP 922715	B1	20080402		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 11171928	A	19990629	JP 1997-354003	19971209 <--
JP 3985077	B2	20071003		
JP 11171846	A	19990629	JP 1997-354004	19971209 <--
JP 4168184	B2	20081022		
JP 11255839	A	19990921	JP 1998-80582	19980313 <--
JP 11255831	A	19990921	JP 1998-80583	19980313 <--
JP 4069221	B2	20080402		
JP 11263760	A	19990928	JP 1998-80581	19980313 <--
JP 4088703	B2	20080521		
JP 2000086729	A	20000328	JP 1998-276403	19980914 <--
JP 4217804	B2	20090204		
US 20020188084	A1	20021212	US 2002-178474	20020625 <--
US 6852819	B2	20050208		
US 20040223947	A1	20041111	US 2004-869870	20040618 <--
US 20040223945	A1	20041111	US 2004-869967	20040618 <--
US 6858694	B2	20050222		
JP 2009161771	A	20090723	JP 2009-95000	20090409 <--
PRIORITY APPLN. INFO.:			JP 1997-354003	A 19971209 <--
			JP 1997-354004	A 19971209 <--
			JP 1998-80581	A 19980313 <--
			JP 1998-80582	A 19980313 <--
			JP 1998-80583	A 19980313 <--
			JP 1998-276403	A 19980914 <--
			US 1998-207203	A3 19981208 <--
			US 2002-178474	A3 20020625 <--

AB A stimuli-responsive polymer derivative utilizing keto-enol tautomerization is disclosed. Also disclosed are a simple process for producing an N-

# 10/588514

acyl(meth)acrylamide derivative which can be used as a monomer for the stimuli-responsive polymer, a process for the production of an intermediate thereof, and an intermediate thus produced. The stimuli-responsive polymer can be used for drug delivery systems, chemovalves, various separating agents, catheters, artificial muscles, etc. A solution containing a thermo-responsive copolymer of N-acetylacrylamide-methacrylamide-N,N'-methylene bisacrylamide was prepared and kept at 10°. To this solution was added taxol and left over to permeate the gel overnight at 42°.

When the gel was kept at 38° in physiol. saline taxol was released but when kept at 10° in physiol. saline taxol was not released.

IT 227182-85-6P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(stimuli-responsive polymer utilizing keto-enol tautomerization for pharmaceutical and medical use)

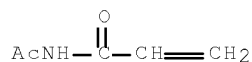
RN 227182-85-6 HCAPLUS

CN 2-Propenamide, N,N'-methylenebis-, polymer with N-acetyl-2-propenamide and 2-methyl-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 1432-45-7

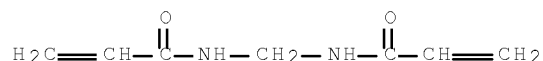
CMF C5 H7 N O2



CM 2

CRN 110-26-9

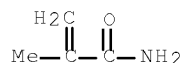
CMF C7 H10 N2 O2



CM 3

CRN 79-39-0

CMF C4 H7 N O



IC ICM C08F020-52

ICS C08F220-52; C07C231-10; C07C233-90; C07C257-20

CC 63-7 (Pharmaceuticals)  
 Section cross-reference(s): 35, 38

IT Proteins, specific or class  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (A; stimuli-responsive polymer utilizing keto-enol tautomerization for pharmaceutical and medical use)

IT Immunoglobulins  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (G; stimuli-responsive polymer utilizing keto-enol tautomerization for pharmaceutical and medical use)

IT 227182-75-4P 227182-76-5P 227182-77-6P  
 RL: PRP (Properties); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (stimuli-responsive polymer utilizing keto-enol tautomerization for pharmaceutical and medical use)

IT 25189-55-3P, Poly-N-isopropylacrylamide 65993-28-4P,  
 Poly(n-acetylacrylamide 227182-74-3P 227182-78-7P 227182-79-8P  
 227182-80-1P 227182-81-2P 227182-82-3P 227182-84-5P  
 227182-85-6P  
 RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (stimuli-responsive polymer utilizing keto-enol tautomerization for pharmaceutical and medical use)

IT 33069-62-4, Taxol  
 RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)  
 (stimuli-responsive polymer utilizing keto-enol tautomerization for pharmaceutical and medical use)

OS.CITING REF COUNT: 10 THERE ARE 10 CAPLUS RECORDS THAT CITE THIS RECORD (43 CITINGS)

L28 ANSWER 21 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1999:312759 HCAPLUS Full-text  
 DOCUMENT NUMBER: 131:23268  
 TITLE: Hydrophilic polymers and cosmetic moisturizers containing them  
 INVENTOR(S): Kawamukai, Hiroshi; Oda, Akira  
 PATENT ASSIGNEE(S): Kao Corp., Japan  
 SOURCE: Jpn. Kokai Tokkyo Koho, 7 pp.  
 CODEN: JKXXAF  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 11130822	A	19990518	JP 1997-300353	19971031 <--
PRIORITY APPLN. INFO.:			JP 1997-300353	19971031 <--

AB The polymers comprise [CH<sub>2</sub>CR<sub>1</sub>[COX(CH<sub>2</sub>)<sub>p</sub>N+R<sub>2</sub>R<sub>3</sub>YCO<sub>2</sub>-]] [R<sub>1</sub> = H, Me; X = NH, O; R<sub>2</sub>, R<sub>3</sub> = C<sub>1</sub>-10 (hydroxy)alkyl; Y = C<sub>1</sub>-10 (hydroxy)saturated hydrocarbylene; p = 2-5] and [CH<sub>2</sub>CR<sub>4</sub>(COZAOH)] (R<sub>4</sub> = H, Me; Z = NH, O; A = C<sub>2</sub>-4 alkylene) and show weight average mol. weight 500-500,000. Also claimed are moisturizers containing the copolymers useful for cosmetics, shampoos, cleansers, etc. The polymers show long-lasting moisturizing effect. Skin-moisturizing effect of N-(3-acrylamidopropyl)-N-carboxymethyl-N,N-dimethylammonium hydroxide-N-(2-hydroxyethyl)acrylamide copolymer (preparation given) was maintained even after washing skin with an aqueous solution of K myristate.

IT 226698-66-4P  
 RL: BUU (Biological use, unclassified); PNU (Preparation, unclassified); BIOL (Biological study); PREP (Preparation); USES (Uses)

10/588514

(preparation of hydrophilic acrylic polymers having betaine group and hydroxyalkyl group as moisturizers for cosmetics)

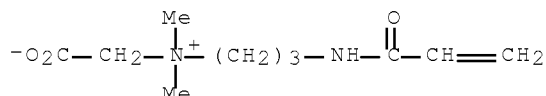
RN 226698-66-4 HCAPLUS

CN 1-Propanaminium, N-(carboxymethyl)-N,N-dimethyl-3-[(1-oxo-2-propenyl)amino]-, inner salt, polymer with N-(2-hydroxyethyl)-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 79702-44-6

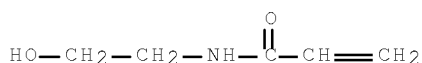
CMF C10 H18 N2 O3



CM 2

CRN 7646-67-5

CMF C5 H9 N O2



IC ICM C08F220-28

ICS A61K007-00; C08F220-36; C08F220-58; C08F220-60; C11D003-37

CC 62-4 (Essential Oils and Cosmetics)

Section cross-reference(s): 38

IT 226698-66-4P 226698-68-6P 226698-70-0P

226698-72-2P 226698-75-5P 226698-78-8P

RL: BUU (Biological use, unclassified); PNU (Preparation, unclassified);

BIOL (Biological study); PREP (Preparation); USES (Uses)

(preparation of hydrophilic acrylic polymers having betaine group and hydroxyalkyl group as moisturizers for cosmetics)

OS.CITING REF COUNT: 4 THERE ARE 4 CAPLUS RECORDS THAT CITE THIS RECORD  
(4 CITINGS)

L28 ANSWER 22 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:795508 HCAPLUS Full-text

DOCUMENT NUMBER: 130:96601

TITLE: Hydrophilic gels comprising

N-acryloyl-β-hydroxyaspartate polymers

INVENTOR(S): Noji, Minoru; Kurokawa, Takashi; Nagao, Susumu; Endo, Takeshi

PATENT ASSIGNEE(S): Nippon Kayaku Co., Ltd., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 4 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10330426	A	19981215	JP 1997-156159	19970530 <--
PRIORITY APPLN. INFO.:			JP 1997-156159	19970530 <--

OTHER SOURCE(S): MARPAT 130:96601

AB Hydrophilic gels, useful as sanitary water absorbents, wound covering materials, drug carriers, cosmetic materials (no data), etc., are obtained by polymerization and crosslinking of  $\text{H}_2\text{C}:\text{CRCONHCH}(\text{CO}_2\text{X})\text{CH}(\text{OH})\text{CO}_2\text{X}$  (I; R = H, Me; X = H, monovalent metal,  $\text{NH}_4$ , C1-5 alkyl). Thus, 50 g I (R = Me, X = H) and 5 g methylenebisacrylamide were polymerized in  $\text{H}_2\text{O}$  in the presence of azobis-2-amidinopropane $\cdot 2\text{HCl}$  at 50-80° for .apprx.24 h, dried, and powdered to give a hydrophilic gel.

IT 219323-25-8P

RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); TEM (Technical or engineered material use); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(hydrophilic gels comprising acryloyl hydroxyaspartate polymers)

RN 219323-25-8 HCAPLUS

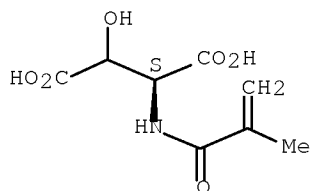
CN L-Aspartic acid, 3-hydroxy-N-(2-methyl-1-oxo-2-propenyl)-, polymer with N,N'-methylenebis[2-propenamide] (9CI) (CA INDEX NAME)

CM 1

CRN 219323-24-7

CMF C8 H11 N O6

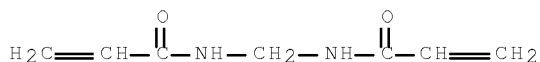
Absolute stereochemistry.



CM 2

CRN 110-26-9

CMF C7 H10 N2 O2



IC ICM C08F020-58

ICS C08F008-00

CC 38-3 (Plastics Fabrication and Uses)  
Section cross-reference(s): 62, 63

ST hydrophilic gel acryloyl aspartate polymer; aspartate acryloyl hydroxy polymer hydrophilic gel; sanitary water ~~absorbent~~ hydrophilic gel; wound covering hydrophilic gel acryloylaspartate polymer; drug carrier hydrophilic gel acryloylaspartate polymer; cosmetic hydrophilic gel acryloylaspartate polymer

IT 219323-25-8P 219323-28-1DP, hydrolyzed, sodium salts  
219323-32-7P 219323-34-9P 219323-36-1P 219323-38-3P  
RL: BUU (Biological use, unclassified); SPN (Synthetic preparation); TEM (Technical or engineered material use); THU (Therapeutic use); ~~BIOL~~ (Biological study); PREP (Preparation); USES (Uses)  
(hydrophilic gels comprising acryloyl hydroxyaspartate polymers)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
(1 CITINGS)

L28 ANSWER 23 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 1998:693251 HCAPLUS Full-text  
DOCUMENT NUMBER: 130:11559  
TITLE: Mothproofing sheet and its manufacture  
INVENTOR(S): Kubota, Shizuo; Ito, Osamu; Doi, Kiyotaka; Kubo, Shiho  
PATENT ASSIGNEE(S): Wakayama Prefecture, Japan; Toyo Yakuhi Kogyo K. K.  
SOURCE: Jpn. Kokai Tokkyo Koho, 8 pp.  
CODEN: JKXXAF

DOCUMENT TYPE: Patent  
LANGUAGE: Japanese  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 10286914	A	19981027	JP 1997-95983	19970414 <--
JP 2994300	B2	19991227		

PRIORITY APPLN. INFO.: JP 1997-95983 19970414 <--

AB The mothproofing sheet is manufactured by (1) impregnating inorg. porous particles with mothproofing agents, (2) mixing the particles with a binder solution containing aqueous polymers, polyfunctional monomers, and redox radical initiators, (3) contacting the mixture with the sheet substrate to fix the porous particles, and (4) heating the substrate between room temperature and 50° to cure the binder components. Hiba oil was dropped over hollow silica particles (God ball B C6) and the particles were dispersed in an aqueous solution containing surfactants (Emulgen and Aerosol OT). The dispersion was mixed with New Coat 4900-1, NK Ester 200, methylenebisacrylamide, and ammonium peroxodisulfate, and NaHSO<sub>3</sub> to give a binder dispersion. A polypropylene nonwoven fabric was soaked in the dispersion, squeezed, and then cured at 50° for 5 min to give a mothproofing sheet. A similarly prepared sheet containing pyrethrum extract showed good repellent effect against termites, rice weevils, spiders, centipede, etc.

IT 216005-48-0P  
RL: AGR (Agricultural use); BUU (Biological use, unclassified); PNU (Preparation, unclassified); POF (Polymer in formulation); ~~BIOL~~ (Biological study); PREP (Preparation); USES (Uses)  
(manufacture of mothproofing sheet by adhering active ingredient-containing silica hollow particles using binder compns. containing aqueous polymers and polyfunctional monomers)

RN 216005-48-0 HCAPLUS  
CN 2-Propenamide, N,N'-methylenebis-, polymer with  
N-(hydroxymethyl)-2-propenamide and Vanatex M 502 (9CI) (CA INDEX NAME)

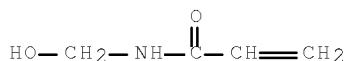
CM 1

CRN 189233-54-3  
 CMF Unspecified  
 CCI PMS, MAN

\*\*\* STRUCTURE DIAGRAM IS NOT AVAILABLE \*\*\*

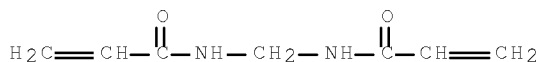
CM 2

CRN 924-42-5  
 CMF C4 H7 N O2



CM 3

CRN 110-26-9  
 CMF C7 H10 N2 O2



IC ICM B32B027-18  
 ICS C09C001-00; C09J007-02; C09J011-00; A01N065-00  
 CC 5-4 (Agrochemical Bioregulators)  
 Section cross-reference(s): 38  
 IT Essential oils  
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (hiba wood; manufacture of mothproofing sheet by adhering active ingredient-containing silica hollow particles using binder compns. containing aqueous polymers and polyfunctional monomers)  
 IT Fats and Glyceridic oils, biological studies  
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
 (mustard; manufacture of mothproofing sheet by adhering active ingredient-containing silica hollow particles using binder compns. containing aqueous polymers and polyfunctional monomers)  
 IT Polypropene fibers, biological studies  
 RL: AGR (Agricultural use); BUU (Biological use, unclassified); PNU (Preparation, unclassified); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (nonwoven fabric, substrate; manufacture of mothproofing sheet by adhering active ingredient-containing silica hollow particles using binder compns. containing aqueous polymers and polyfunctional monomers)  
 IT 499-44-5, Hinokitiol  
 RL: AGR (Agricultural use); BAC (Biological activity or effector, except



10/588514

adverse); BSU (Biological study, unclassified); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)  
(manufacture of mothproofing sheet by adhering active ingredient-containing silica hollow particles using binder compns. containing aqueous polymers

and

polyfunctional monomers)

IT 7631-86-9, God Ball B 6C, biological studies

RL: AGR (Agricultural use); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(manufacture of mothproofing sheet by adhering active ingredient-containing silica hollow particles using binder compns. containing aqueous polymers

and

polyfunctional monomers)

IT 216005-46-8P 216005-47-9P ~~216005-48-0P~~ 216083-25-9P

216083-28-2P 216083-33-9P

RL: AGR (Agricultural use); BUU (Biological use, unclassified); PNU (Preparation, unclassified); POF (Polymer in formulation); BIOL (Biological study); PREP (Preparation); USES (Uses)

(manufacture of mothproofing sheet by adhering active ingredient-containing silica hollow particles using binder compns. containing aqueous polymers

and

polyfunctional monomers)

IT 9003-07-0

RL: AGR (Agricultural use); BUU (Biological use, unclassified); BIOL (Biological study); USES (Uses)

(nonwoven fabric, substrate; manufacture of mothproofing sheet by adhering active ingredient-containing silica hollow particles using binder compns. containing aqueous polymers and polyfunctional monomers)

OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
(3 CITINGS)

L28 ANSWER 24 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1998:15631 HCAPLUS Full-text

DOCUMENT NUMBER: 128:119637

ORIGINAL REFERENCE NO.: 128:23358h,23359a

TITLE: Oral administration of iron-binding crosslinked amine polymers

INVENTOR(S): Mandeville, W. Harry, III; Holmes-Farley, Stephen Randall

PATENT ASSIGNEE(S): Geltex Pharmaceuticals, USA

SOURCE: U.S., 28 pp., Cont.-in-part of U.S. 5,487,888.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 2

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
US 5702696	A	19971230	US 1995-567933	19951206 <--
US 5487888	A	19960130	US 1993-65546	19930520 <--
US 6605270	B1	20030812	US 2000-655998	20000906 <--
PRIORITY APPLN. INFO.:			US 1993-65546	A2 19930520 <--
			US 1995-567933	A3 19951206 <--
			US 1997-956572	B1 19971023 <--
			US 1999-406311	B1 19990927 <--

AB Iron binding polymers are provided for decreasing the absorption of iron from the gastrointestinal tract. The polymers are orally administered, and are useful for treatment of iron overload disorders. In an example, N-

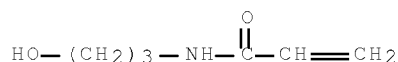
# 10/588514

vinylacetamide is copolymd. with divinylbenzene and the product is hydrolyzed to give a crosslinked vinylamine polymer.

IT 201610-37-9P, N-(6-Aminohexyl)acrylamide-N-(3-hydroxypropyl)acrylamide-methylenebisacrylamide copolymer  
 RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of iron-binding crosslinked amine polymers for oral administration)  
 RN 201610-37-9 HCAPLUS  
 CN 2-Propenamide, N,N'-methylenebis-, polymer with N-(6-aminohexyl)-2-propenamide and N-(3-hydroxypropyl)-2-propenamide (9CI)  
 (CA INDEX NAME)

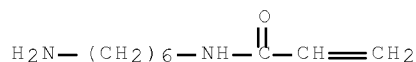
CM 1

CRN 44817-99-4  
 CMF C6 H11 N O2



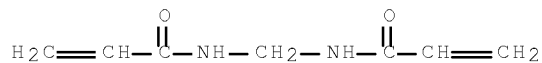
CM 2

CRN 7530-30-5  
 CMF C9 H18 N2 O



CM 3

CRN 110-26-9  
 CMF C7 H10 N2 O2



IC ICM A61K031-785  
 INCL 424078120  
 CC 63-6 (Pharmaceuticals)  
 Section cross-reference(s): 37, 38  
 IT Amines, biological studies  
 RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (polyamines, nonpolymeric; preparation of iron-binding crosslinked amine

- polymers for oral administration)
- IT Polyamines  
 RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of iron-binding crosslinked amine polymers for oral administration)
- IT 5470-11-1DP, Hydroxylamine hydrochloride, reaction products with PMMA 9011-14-7DP, PMMA, reaction products with hydroxylamine hydrochloride  
 RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (in preparation of iron-binding crosslinked amine polymers for oral administration)
- IT 71550-12-4P, Allylamine hydrochloride homopolymer  
 RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of iron-binding amine polymers for oral administration)
- IT 161035-25-2P, Methylenebisacrylamide-N-succinimidyl acrylate copolymer 201610-43-7P, N-(2-Aminoethyl)acrylamide-methyl acrylate-methylenebisacrylamide copolymer  
 RL: IMF (Industrial manufacture); RCT (Reactant); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)  
 (preparation of iron-binding crosslinked amine polymers for oral administration)
- IT 60-24-2DP, reaction products with cystaminediacrylamide-methylenebisacrylamide copolymer 65-49-6DP, 4-Aminosalicylic acid, reaction products with divinylbenzene-methacryloyl chloride copolymer 104-78-9DP, 3-(Diethylamino)propylamine, reaction products with Me methacrylate-divinylbenzene copolymer 3033-77-0DP, Glycidyltrimethylammonium chloride, reaction products with polyamines 9017-37-2DP, Divinylbenzene-methyl methacrylate copolymer, reaction products with diethylaminopropylamine 25610-84-8P, Epichlorohydrin-ethylenimine copolymer 74373-35-6DP, Cystaminediacrylamide-methylenebisacrylamide copolymer, reaction products with mercaptoethanol 74373-35-6P, Cystamine diacrylamide-methylenebisacrylamide copolymer 130530-88-0P, (3-Methacrylamidopropyl)trimethylammonium chloride-methylenebisacrylamide copolymer 132460-82-3P, N-[3-(Dimethylamino)propyl]acrylamide-methylenebisacrylamide copolymer 147898-29-1DP, Divinylbenzene-N-vinylacetamide copolymer, hydrolyzed 152751-57-0P, Allylamine hydrochloride-epichlorohydrin copolymer 160949-77-9P, N-[3-(Dimethylamino)propyl]acrylamide hydrochloride-methylenebisacrylamide copolymer 160949-78-0P, N-[3-(Dimethylamino)propyl]methacrylamide hydrochloride-methylenebisacrylamide copolymer 161035-03-6P, N-Allylacrylamide-N-(2-aminoethyl)acrylamide copolymer 161035-04-7P, N-(2-Aminoethyl)acrylamide-polyethylene glycol dimethacrylate copolymer 161035-13-8P, N-(6-Aminohexyl)acrylamide-N-dodecylacrylamide-methylenebisacrylamide copolymer 161035-17-2P, N-(2-Cyanoethyl)-N-methylacrylamide-methylenebisacrylamide copolymer 161035-22-9P, 1-(3-Acrylamidopropyl)imidazole-methylenebisacrylamide copolymer 162786-28-9P, Acryloyl chloride-ethylenimine copolymer 162786-36-9DP, Divinylbenzene-methacryloyl chloride copolymer, reaction products with 4-aminosalicylic acid 162786-44-9P, Diethylenetriamine-divinylbenzene-methyl methacrylate copolymer 198342-57-3DP, reaction products with polyamines 198343-02-1P, Allylamine hydrochloride-1,4-butanediol diglycidyl ether copolymer 198343-03-2P, Allylamine hydrochloride-1,2-ethanediol diglycidyl ether copolymer 198343-04-3P, Allylamine hydrochloride-dimethyl succinate copolymer 200122-48-1DP, reaction products with polyamines 201610-17-5P, Allylamine hydrochloride-1,4-butanediol diglycidyl ether

copolymer, compound with 1-iodooctane 201610-18-6P, Allylamine hydrochloride-epichlorohydrin copolymer, compound with 1-iodooctane 201610-19-7P, Allylamine hydrochloride-epichlorohydrin copolymer, compound with 1-iodooctadecane 201610-20-0P, Allylamine hydrochloride-1,4-butanediol diglycidyl ether copolymer, compound with 1-iodododecane 201610-21-1P, Allylamine hydrochloride-1,4-butanediol diglycidyl ether copolymer, compound with benzyl bromide 201610-22-2P, Allylamine hydrochloride-epichlorohydrin copolymer, compound with benzyl bromide 201610-23-3P, Allylamine hydrochloride-epichlorohydrin copolymer, compound with 1-iododecane 201610-24-4P, Allylamine hydrochloride-epichlorohydrin copolymer, compound with 1-iodobutane 201610-25-5P, Allylamine hydrochloride-epichlorohydrin copolymer, compound with 1-iodotetradecane 201610-26-6P 201610-27-7DP, reaction products with glycidyltrimethylammonium chloride 201610-28-8P, N-(2-Aminoethyl)acrylamide-methylenebisacrylamide copolymer 201610-29-9P 201610-31-3P 201610-32-4P 201610-33-5P 201610-34-6P 201610-35-7P, N-(4-Aminobutyl)acrylamide-methylenebisacrylamide copolymer 201610-36-8P, N-(6-Aminohexyl)acrylamide-methylenebisacrylamide copolymer 201610-37-9P, N-(6-Aminohexyl)acrylamide-N-(3-hydroxypropyl)acrylamide-methylenebisacrylamide copolymer 201610-38-0P, Acrylamide-N-(6-aminohexyl)acrylamide-methylenebisacrylamide-vinylphosphonic acid copolymer 201610-39-1P, Acrylamide-N-(6-aminohexyl)acrylamide-N-(dehydroabietyl)acrylamide-methylenebisacrylamide copolymer 201610-40-4P, 1-(2-Aminoethyl)piperazine-ethylene glycol dimethacrylate-itaconic anhydride copolymer 201610-42-6P, Cysteine acrylamide-methylenebisacrylamide copolymer 201610-43-7DP, N-(2-Aminoethyl)acrylamide-methyl acrylate-methylenebisacrylamide copolymer, reaction products with hydroxylamine hydrochloride 201610-46-0P, Methylenebisacrylamide-pentaethylenhexamine-N-succinimidyl acrylate copolymer 201610-47-1P, Methylenebisacrylamide-N-succinimidyl acrylate-tris(2-aminoethyl)amine copolymer 201610-48-2P 201687-53-8P, Methylenebisacrylamide-vinylphosphonic acid copolymer choline ester  
 RL: IMF (Industrial manufacture); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (preparation of iron-binding crosslinked amine polymers for oral administration)

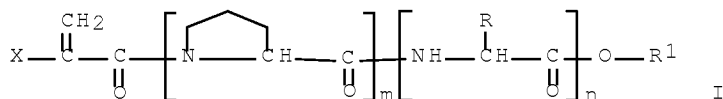
OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)  
 REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 25 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1997:696736 HCAPLUS Full-text  
 DOCUMENT NUMBER: 127:362660  
 ORIGINAL REFERENCE NO.: 127:70897a,70900a  
 TITLE: Drug delivery systems containing pH-sensitive polymers  
 INVENTOR(S): Yoshida, Masaru; Asano, Masaharu; Omichi, Hideki; Katakai, Ryoichi; Negishi, Munehiro; Miyajima, Masaharu  
 PATENT ASSIGNEE(S): Japan Atomic Energy Research Institute, Japan; Zeria Pharmaceutical Co., Ltd.  
 SOURCE: PCT Int. Appl., 17 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: Japanese  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
------------	------	------	-----------------	------

-----	-----	-----	-----	-----
WO 9738969	A1	19971023	WO 1997-JP1256	19970411 <--
W: AU, CA, JP, KR, US				
RW: AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
AU 9725217	A	19971107	AU 1997-25217	19970411 <--
PRIORITY APPLN. INFO.:			JP 1996-91408	A 19960412 <--
			WO 1997-JP1256	W 19970411 <--

GI



AB The invention relates to novel polymers, more particularly pH-sensitive polymers, a base for medicaments directed to delivery to the large intestine by utilizing the same, and segments of the same. The polymers comprise segments of a compound represented by general formula (I), are prepared by polymerization of segments of the same or dissimilar types, and have d. p. of 30 to 5000, wherein X represents hydrogen or methyl; R represents hydrogen, lower alkyl, amino-lower alkyl, carboxy-lower alkyl, mercapto, benzyl, or indolemethyl; R<sup>1</sup> represents hydrogen or lower alkyl; and m and n are each an integer of 0 to 15, provided that m and n are not simultaneously 0.

IT 198333-93-6P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(drug delivery systems containing pH-sensitive polymers for drug delivery to the large intestine)

RN 198333-93-6 HCAPLUS

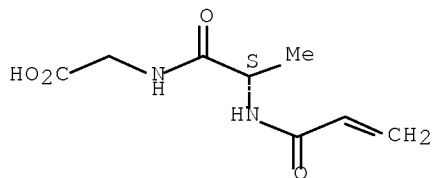
CN Glycine, N-(1-oxo-2-propenyl)-L-alanyl-, homopolymer (9CI) (CA INDEX NAME)

CM 1

CRN 198333-92-5

CMF C8 H12 N2 O4

Absolute stereochemistry.



IC ICM C07C233-49

ICS C07C233-59; C07D207-16; C07D209-04; C07D403-12; C07K005-078; C07K005-097; C07K005-117; C07K007-06; C07K007-08; C08F020-54; C08F299-02; A61K031-40; A61K047-34

CC 63-7 (Pharmaceuticals)

Section cross-reference(s): 38

IT Polymers, biological studies

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pH-sensitive; drug delivery systems containing pH-sensitive polymers for drug delivery to the large intestine)

IT 109-16-0, Triethylene glycol dimethacrylate 1680-21-3, Triethylene glycol diacrylate 2358-84-1 4074-88-8, Diethylene glycol diacrylate 25852-47-5 26570-48-9

RL: RCT (Reactant); THU (Therapeutic use); BIOL (Biological study)

; RACT (Reactant or reagent); USES (Uses)

(drug delivery systems containing pH-sensitive polymers for drug delivery to the large intestine)

IT 30602-14-3P 30602-15-4P 60474-83-1P 97969-66-9P 112889-33-5P

117391-84-1P 158212-05-6P 159597-66-7P 173931-46-9P

~~198333-93-6P~~ ~~198333-95-8P~~ 198333-97-0P

198333-98-1P 198333-99-2P 198334-01-9P ~~198334-02-0P~~

198334-04-2P 198334-06-4P 198334-08-6P 198334-10-0P 198334-12-2P

198334-14-4P 198334-15-5P 198334-17-7P

RL: SPN (Synthetic preparation); THU (Therapeutic use); BIOL

(Biological study); PREP (Preparation); USES (Uses)

(drug delivery systems containing pH-sensitive polymers for drug delivery to the large intestine)

IT 53-86-1, Indomethacin 89-57-6, 5-AminoSalicylic acid

RL: THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(drug delivery systems containing pH-sensitive polymers for drug delivery to the large intestine)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD (2 CITINGS)

REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 26 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1997:278804 HCAPLUS Full-text

DOCUMENT NUMBER: 126:251589

ORIGINAL REFERENCE NO.: 126:48649a,48652a

TITLE: Dispersions of crosslinked, water-soluble polymers

INVENTOR(S): Braun, Manfred; Carl, Joachim; Desch, Wolfram; Quis, Peter

PATENT ASSIGNEE(S): Rohm GmbH, Germany

SOURCE: Ger. Offen., 14 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
DE 19532229	A1	19970306	DE 1995-19532229	19950831 <--
EP 761701	A1	19970312	EP 1996-113359	19960821 <--
EP 761701	B1	19991103		
R: AT, BE, CH, DE, DK, ES, FR, GB, IT, LI, NL, SE				
AT 186310	T	19991115	AT 1996-113359	19960821 <--
ES 2140769	T3	20000301	ES 1996-113359	19960821 <--
PRIORITY APPLN. INFO.:			DE 1995-19532229	A 19950831 <--

AB The title dispersions, with low viscosity and useful as flocculants and especially as adhesives (no data), are prepared by aqueous polymerization of mixts. of H<sub>2</sub>O-soluble monomers 50-99.99, crosslinking N-methylol compds. 0.01-5, crosslinking polyenes 0-1, hydrophobic monomers 0-30, and amphiphilic

# 10/588514

monomers 0-20% in the presence of polymeric dispersants incompatible with the product polymer. Stirring 40% aqueous poly(diallyldimethylammonium chloride) (I) 350, 40% aqueous acrylamide 242.5, 80% aqueous (trimethylammonio)methyl acrylate chloride 125, Bu acrylate 3, N-methylolmethacrylamide 0.48, an azo compound initiator 0.04, and H<sub>2</sub>O 279.5 g at 55° for 1.5 h, adding 0.2 g initiator, stirring at 65° for 1 h, and adding 200 g I solution gave a 35% dispersion with viscosity 44.9 Pa-s, useful as a flocculant and as an adhesive with high adhesion.

IT 188709-52-6P

RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)

(dispersions of crosslinked, water-soluble polymers)

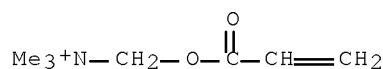
RN 188709-52-6 HCAPLUS

CN Methanaminium, N,N,N-trimethyl-1-[(1-oxo-2-propenyl)oxy]-, chloride, polymer with butyl 2-propenoate, N-(hydroxymethyl)-2-methyl-2-propenamide and 2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 101329-25-3

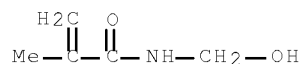
CMF C7 H14 N O2 . Cl



CM 2

CRN 923-02-4

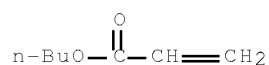
CMF C5 H9 N O2



CM 3

CRN 141-32-2

CMF C7 H12 O2



CM 4

CRN 79-06-1

CMF C3 H5 N O



IC ICM C08F020-02  
ICS C08F002-20; D21H021-10; C09K017-20  
ICA D21H017-37; B01D021-01; B01F017-52; C09D007-02; D06N007-00  
ICI C08F220-02, C08F220-04, C08F220-06, C08F220-10, C08F220-54, C08F220-60  
CC 35-4 (Chemistry of Synthetic High Polymers)  
Section cross-reference(s): 19, 38, 43  
IT Adhesives  
Flocculants  
Soil amendments  
Thickening agents  
(dispersions of crosslinked, water-soluble polymers)  
IT Paper  
(dispersions of crosslinked, water-soluble polymers as retention aids in papermaking)  
IT Quaternary ammonium compounds, preparation  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(polymers; dispersions of crosslinked, water-soluble polymers)  
IT 26062-79-3, Poly(diallyldimethylammonium chloride)  
RL: MOA (Modifier or additive use); USES (Uses)  
(dispersant; dispersions of crosslinked, water-soluble polymers)  
IT 188709-52-8P 188709-54-8P  
RL: IMF (Industrial manufacture); TEM (Technical or engineered material use); PREP (Preparation); USES (Uses)  
(dispersions of crosslinked, water-soluble polymers)  
OS.CITING REF COUNT: 3 THERE ARE 3 CAPLUS RECORDS THAT CITE THIS RECORD  
(3 CITINGS)

L28 ANSWER 27 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 1996:644022 HCAPLUS Full-text  
DOCUMENT NUMBER: 125:330154  
ORIGINAL REFERENCE NO.: 125:61847a,61850a  
TITLE: 1H NMR Characterization of Swelling in Crosslinked Polymer Systems  
AUTHOR(S): O'Connor, P. J.; Cutie, S. S.; Smith, P. B.; Martin, S. J.; Sammler, R. L.; Harris, W. I.; Marks, M. J.; Wilson, L.  
CORPORATE SOURCE: Analytical Sciences Laboratory, Dow Chemical Company, Midland, MI, 48667, USA  
SOURCE: Macromolecules (1996), 29(24), 7872-7884  
CODEN: MAMOBX; ISSN: 0024-9297  
PUBLISHER: American Chemical Society  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
AB A 1H NMR method capable of determining the level of swelling of microscopic volume elements (about 20 µm in diameter) within crosslinked materials is



described. The fact that it is a microscopic swell measurement makes it extremely useful for the characterization of the swelling heterogeneities which may exist within common network systems, such as core/shell or other morphologies. The method utilizes the differences in chemical shift between solvent absorbed into the crosslinked polymer and that of solvent outside the polymer. This chemical shift difference is then correlated to macroscopic swelling (rather than crosslinking) through a simple model which encompasses both the effective chemical crosslinks and the entanglement crosslinks in the manner of classical swelling expts. The anal. is demonstrated for styrene-divinylbenzene copolymer beads, crosslinked polycarbonates, ion-exchange cation resins and crosslinked poly(acrylic acid). A calibration is, in each case, developed with a series of standard materials whose bulk swelling characteristics were determined. An example of the anal. of the crosslinking morphol. within a single cation-exchange bead is also presented. The anal. of swelling by this <sup>1</sup>H NMR method appears to be applicable to any network system with aromatic or acid functionality. Its application is expected to enable identification of new structure/property relationships critical for developing advanced materials.

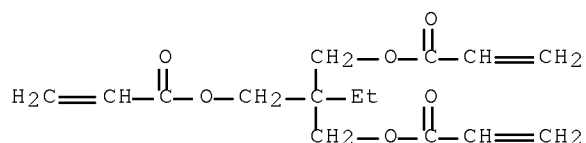
II 183537~15~7, Acrylic acid-bis(acrylamido)acetic  
acid-trimethylolpropane triacrylate copolymer  
RL: PRP (Properties)  
(proton NMR characterization of swelling in crosslinked polymer  
systems)

RN	183537-15-7	HCAPLUS
CN	2-Propenoic acid, polymer with bis[(1-oxo-2-propenyl)amino]acetic acid and 2-ethyl-2-[[[(1-oxo-2-propenyl)oxy]methyl]-1,3-propanediyl di-2-propenoate (9CI) (CA INDEX NAME)	

CM 1

CRN 15625-89-5

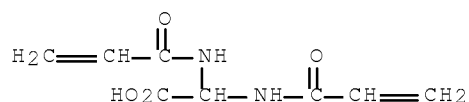
CMF C15 H20 O6



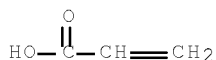
CM 2

CRN 4387-85-3

CMF C8 H10 N2 O4



CM 3

CRN 79-10-7  
CMF C3 H4 O2

CC 36-7 (Physical Properties of Synthetic High Polymers)  
Section cross-reference(s): 37, 38

IT 4082-20-6D, 4-Hydroxybenzocyclobutene, reaction products with bisphenol A-phosgene copolymer 9003-70-7, Divinylbenzene-styrene copolymer 9003-70-7D, Divinylbenzene-styrene copolymer, sulfonated 25971-63-5D, Bisphenol A-phosgene copolymer, reaction products with 4-Hydroxybenzocyclobutene 183537-15-7, Acrylic acid-bis(acrylamido)acetic acid-trimethylolpropane triacrylate copolymer  
RL: PRP (Properties)  
(proton NMR characterization of swelling in crosslinked polymer systems)

OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

L28 ANSWER 28 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 1996:607499 HCAPLUS Full-text  
DOCUMENT NUMBER: 125:257280  
ORIGINAL REFERENCE NO.: 125:47871a,47874a  
TITLE: Crosslinked polymers for preparation of contact lenses  
INVENTOR(S): Mueller, Beat  
PATENT ASSIGNEE(S): Ciba-Geigy A.-G., Switz.  
SOURCE: PCT Int. Appl., 59 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9624074	A1	19960808	WO 1996-EP245	19960122 <--
W: AL, AM, AU, BB, BG, BR, CA, CN, CZ, EE, FI, GE, HU, IS, JP, KP, KR, LK, LR, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, US, UZ, VN, AZ, BY, KG, KZ, RU, TJ, TM				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9644386	A	19960821	AU 1996-44386	19950122 <--
EP 807265	A1	19971119	EP 1996-900604	19960122 <--
EP 807265	B1	20000412		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE				
JP 10513408	T	19981222	JP 1996-523211	19960122 <--
JP 3782451	B2	20060607		
AT 191796	T	20000415	AT 1996-900604	19960122 <--
ZA 9600825	A	19960805	ZA 1996-825	19960202 <--
US 5932674	A	19990803	US 1997-875535	19970730 <--
US 6265509	B1	20010724	US 1999-236158	19990122 <--
JP 2006193526	A	20060727	JP 2006-13475	20060123 <--

## 10/588514

PRIORITY APPLN. INFO.:

CH 1995-312	A 19950203 <--
JP 1996-523211	A3 19960122 <--
WO 1996-EP245	W 19960122 <--
US 1997-875535	A3 19970730 <--

OTHER SOURCE(S): MARPAT 125:257280

AB The invention relates to a novel process for the production of moldings, in particular contact lenses, in which a soluble prepolymer comprising units containing a crosslinkable group and at least one unit containing a modifier is crosslinked in solution, and to moldings, in particular contact lenses, obtainable by this process. The present invention likewise relates to novel prepolymers which can be employed in the novel process, in particular derivs. of a polyvinyl alc. having a mol weight of at least about 2000 which comprises from about 0.5 to about 80%, based on the number of hydroxyl groups in the polyvinyl alc., as disclosed in detail in the description, and to crosslinked polymers, either homopolymers or copolymers, made from these novel prepolymers, a process for the preparation of the novel prepolymers and the homopolymers and copolymers obtainable therefrom, to moldings made from said homopolymers or copolymers, and to a process for the production of contact lenses using said homopolymers or copolymers. Thus, 300 g of a polyvinyl alc. was dissolved in 800 g water at 95°, then 30 g N-(4,4-diethoxybutyl)acrylamide (preparation given), 500 g acetic acid, 100 g concentrate HCl and sufficient water to give a total of 2000 g of reaction solution was added and the mixture was stirred at 20° for 20 h, then the pH was adjusted to 7 and the polymer solution was filtered and purified by ultrafiltration. Irgacure 2959 0.3% was added to a 30% solution of above polymer in a polypropylene contact lens mold, the solution was exposed to UV lamp for 6 s and the lenses were removed from the mold.

IT 182074-08-4P

RL: DEV (Device component use); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(crosslinked polymers for preparation of contact lenses)

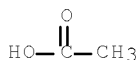
RN 182074-08-4 HCAPLUS

CN 2-Propenamide, N-[2-[(2,2-dimethoxyethyl)amino]-1,1-dimethyl-2-oxoethyl]-, polymer with ethenol, acetate (ester) (9CI) (CA INDEX NAME)

CM 1

CRN 64-19-7

CMF C2 H4 O2



CM 2

CRN 181862-97-5

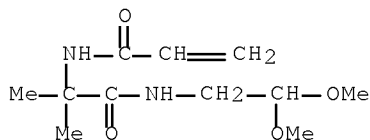
CMF (C11 H20 N2 O4 . C2 H4 O)x

CCI PMS

CM 3

CRN 24214-09-3

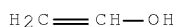
CMF C11 H20 N2 O4



CM 4

CRN 557-75-5

CMF C2 H4 O



IC ICM G02B001-04  
ICS C08F008-00  
CC 63-7 (Pharmaceuticals)  
Section cross-reference(s): 35, 38  
IT 123-72-8DP, Butyraldehyde, reaction products with vinyl alc.-acetal  
copolymer acetate 4170-30-3DP, Crotonaldehyde, reaction products with  
vinyl alc.-acetal copolymer acetate 9003-20-7DP, Mowilith 30, reaction  
products with acetals 181863-00-3DP, reaction products with modifier  
acetals 181863-00-3P 181863-01-4P 182074-05-1P 182074-06-2P  
182074-07-3P 182074-08-4P 182074-09-5P  
182074-10-8P 182074-11-9P  
RL: DEV (Device component use); SPN (Synthetic preparation); THU  
(Therapeutic use); BIOL (Biological study); PREP (Preparation);  
USES (Uses)  
(crosslinked polymers for preparation of contact lenses)  
OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS  
RECORD (11 CITINGS)  
REFERENCE COUNT: 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 29 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 1993:651663 HCAPLUS Full-text  
DOCUMENT NUMBER: 119:251663  
ORIGINAL REFERENCE NO.: 119:44899a,44902a  
TITLE: Superabsorbent polymers and their production  
INVENTOR(S): Buchholz, Fredric L.; Cutie, Sergio S.; Easterly,  
James P., Jr.; Lamphere, Jack C.; Stanley, Frederick  
W.  
PATENT ASSIGNEE(S): Stanley, Caroline, USA; Dow Chemical Co.  
SOURCE: PCT Int. Appl., 25 pp.  
CODEN: PIXXD2  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
------------	------	------	-----------------	------

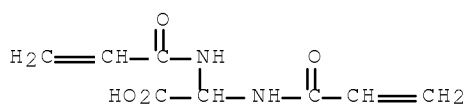
-----  
 WO 9305080 A1 19930318 WO 1992-US7611 19920909 <--  
 W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KR, LK, MG, MN, MW, NO, PL,  
 RO, RU, SD, US  
 RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, SE, BF,  
 BJ, CF, CG, CI, CM, GA, GN, ML, MR, SN, TD, TG  
 AU 9225905 A 19930405 AU 1992-25905 19920909 <--  
 AU 663336 B2 19951005  
 EP 603292 A1 19940629 EP 1992-919743 19920909 <--  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, SE  
 JP 06510557 T 19941124 JP 1992-505477 19920909 <--  
 PRIORITY APPLN. INFO.: US 1991-756731 A2 19910909 <--  
 WO 1992-US7611 A 19920909 <--  
 AB The polymers, useful in personal care articles, diapers, etc., are prepared by  
 polymerizing  $\alpha,\beta$ -ethylenically unsatd. compds. (especially acrylic acid) and  
 crosslinking agents (e.g., methylenebisacrylamide, allyl acrylate), drying,  
 and heating the polymers at 165-230° to give polymers having 60-min absorbency  
 (under 0.3 psi load) of  $\geq 30$  g/g.  
 IT ~~151173-62-5P~~  
 RL: PREP (Preparation)  
 (superabsorbents, heat-treated, preparation of, for personal care articles)  
 RN 151173-62-5 HCAPLUS  
 CN 2-Propenoic acid, polymer with bis[(1-oxo-2-propenyl)amino]acetic acid,  
 sodium salt (9CI) (CA INDEX NAME)

CM 1

CRN 141392-77-0  
 CMF (C8 H10 N2 O4 . C3 H4 O2)x  
 CCI PMS

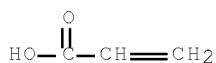
CM 2

CRN 4387-85-3  
 CMF C8 H10 N2 O4



CM 3

CRN 79-10-7  
 CMF C3 H4 O2



IC ICM C08F006-00

ICS C08F220-06; A61L015-24  
 CC 38-3 (Plastics Fabrication and Uses)  
 Section cross-reference(s): 37, 63  
 IT Absorbents  
     (super-, crosslinked acrylic acid copolymer salts, heat-treated, for  
     personal care articles)  
 IT 51838-35-8P, Acrylic acid-trimethylolpropane triacrylate copolymer sodium  
     salt 54843-66-2P, Acrylic acid-methylenebisacrylamide copolymer sodium  
     salt 151173-62-5P 151173-63-6P 151173-64-7P 151305-52-1P  
     151305-60-1P  
 RL: PREP (Preparation)  
     (superabsorbents, heat-treated, preparation of, for personal care articles)  
 OS.CITING REF COUNT: 13 THERE ARE 13 CAPLUS RECORDS THAT CITE THIS  
     RECORD (13 CITINGS)  
 REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS  
     RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L28 ANSWER 30 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1993:175777 HCAPLUS Full-text

DOCUMENT NUMBER: 118:175777

ORIGINAL REFERENCE NO.: 118:30003a,30006a

TITLE: Polyacrylate microspheres useful for therapeutic  
     vascular occlusions

INVENTOR(S): Boschetti, Egisto; Brouard, Michel; Drouet, Ludovic;  
     Giroto, Pierre; Laurent, Alexandre; Wasser, Michel

PATENT ASSIGNEE(S): Sepracor, Inc., USA

SOURCE: PCT Int. Appl., 19 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

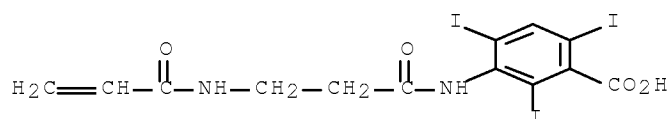
FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9221327	A1	19921210	WO 1992-US4265	19920520 <--
W: AU, BB, BG, BR, CA, CS, FI, HU, JP, KR, LK, MG, MN, MW, NO, PL, RO, RU, SD, US				
RW: AT, BE, BF, BJ, CF, CG, CH, CI, CM, DE, DK, ES, FR, GA, GB, GN, GR, IT, LU, MC, ML, MR, NL, SE, SN, TD, TG				
FR 2676927	A1	19921204	FR 1991-6441	19910529 <--
FR 2676927	B1	19950623		
CA 2110290	A1	19921210	CA 1992-2110290	19920520 <--
CA 2110290	C	20020205		
AU 9220168	A	19930108	AU 1992-20168	19920520 <--
AU 661319	B2	19950720		
EP 588875	A1	19940330	EP 1992-911942	19920520 <--
EP 588875	B1	19970409		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, NL, SE				
JP 06508139	T	19940914	JP 1992-500461	19920520 <--
AT 151284	T	19970415	AT 1992-911942	19920520 <--
ES 2099827	T3	19970601	ES 1992-911942	19920520 <--
JP 3509858	B2	20040322	JP 1993-500461	19920520 <--
US 5635215	A	19970603	US 1994-150148	19940329 <--
US 5648100	A	19970715	US 1995-471303	19950606 <--
PRIORITY APPLN. INFO.:			FR 1991-6441	A 19910529 <--
			WO 1992-US4265	A 19920520 <--
			US 1994-150148	A3 19940329 <--

AB Hydrophilic acrylic copolymer microspheres, coated with a cell-adhesion  
 promoter and, optionally, a marker, are therapeutic and diagnostic

CMF C13 H11 T3 N2 O4



ACCESSION NUMBER: 1992:587848 HCAPLUS Full-text

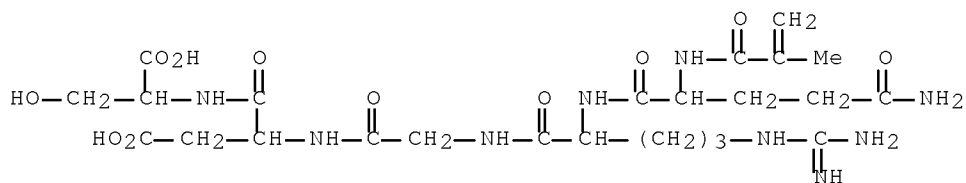
## 10/588514

DOCUMENT NUMBER: 117:187848  
ORIGINAL REFERENCE NO.: 117:32328h,32329a  
TITLE: Propenamide derivatives, polymers, copolymers, and use thereof in inhibiting adhesion of and culturing animal cells  
INVENTOR(S): Komazawa, Hiroyuki; Kojima, Masayoshi; Orikasa, Atsushi  
PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
SOURCE: Eur. Pat. Appl., 75 pp.  
CODEN: EPXXDW  
DOCUMENT TYPE: Patent  
LANGUAGE: English  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 488258	A2	19920603	EP 1991-120332	19911127 <--
EP 488258	A3	19930505		
EP 488258	B1	19960417		
R: CH, DE, GB, LI				
JP 04213310	A	19920804	JP 1991-66157	19910329 <--
JP 2745342	B2	19980428		
JP 04213308	A	19920804	JP 1991-66158	19910329 <--
JP 04213312	A	19920804	JP 1991-66160	19910329 <--
JP 2745343	B2	19980428		
US 6046289	A	20000404	US 1994-278251	19940720 <--
PRIORITY APPLN. INFO.:			JP 1990-324611	A 19901127 <--
			JP 1990-334792	A 19901130 <--
			JP 1990-334793	A 19901130 <--
			JP 1991-66157	A 19910329 <--
			JP 1991-66158	A 19910329 <--
			JP 1991-66160	A 19910329 <--
			US 1991-798624	B1 19911126 <--
AB	Propenamide derivs. R1R2C:CR3CO[NH]Q [Q = R4COX-Arg-Gly-Asp-YnZR5; R1, R2 = H, CO2H; R3 = H, halo, Me, Et, CH2CO2H; X, Y = amino acid, peptide; Z = O, NH; 1 of R4, R5 = H, and the other = (substituted) alkylene or arylene; n = 1-5; brackets indicate group may be present or absent], their (crosslinked) polymers, and their copolymers with H2C:CR6[CO][W]R7 [R6 = H, C1-3 (substituted) alkyl; W = O, NH; R7 = (substituted) alkyl or aryl], where the peptide portion of Q is an adhesive peptide, are useful for inhibiting adhesion of animal cells, for inhibiting coagulation and/or adhesion of blood platelets, and as a substrate (e.g. a hydrogel) for cultivating animal cells. They may be used in modulating immune function, wound healing, and intravascular platelet coagulation and in healing nervous disorders. Examples of preparation of monomers, polymers, and copolymers are presented. Thus, adhesion of blood vessel endothelium cells to fibronectin-coated wells in plastic plates was strongly inhibited by radical-polymerized H2C:CMeC(O)NHC2H4(CO)-Arg-Gly-Asp-Ser at 0.5 mg/mL.			
IT	143821-01-6P RL: SPN (Synthetic preparation); PREP (Preparation) (preparation of, as cell adhesion inhibitor)			
RN	143821-01-6 HCAPLUS			
CN	L-Serine, N-[N-[N-[N2-[N2-(2-methyl-1-oxo-2-propenyl)-L-glutaminy]]-L-arginyl]glycyl]-L- $\alpha$ -aspartyl]-, polymer with 2-(dimethylamino)ethyl 2-propenoate (9CI) (CA INDEX NAME)			
CM	1			
CRN	143783-24-8			



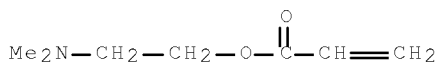
CMF C24 H39 N9 O11



CM 2

CRN 2439-35-2

CMF C7 H13 N O2



IC ICM C07K005-08  
ICS C12N005-00; A61K037-02; A61K047-48; A61L027-00; C08F289-00;  
C07K017-06

CC 9-11 (Biochemical Methods)  
Section cross-reference(s): 1, 34, 35, 38

IT Fibronectins  
RL: BIOL (Biological study)  
(blood vessel endothelium cell adhesion to, peptide-containing polymers inhibition of)

IT Animal growth regulators  
RL: BIOL (Biological study)  
(vitronectins, blood vessel endothelium cell adhesion to, peptide-containing polymers inhibition of)

IT 143821-01-6P 143821-02-7P 143821-03-8P 143821-04-9P  
143821-05-0P 143821-06-1P 143821-07-2P 143847-74-9P  
143847-75-0P 143847-76-1P 143847-78-3P 143847-79-4P  
143847-80-7P 143847-81-8P 143847-82-9P  
143847-83-0P 143847-84-1P 143847-85-2P 143847-87-4P  
143847-88-5P 143847-89-6P 143847-90-9P 143847-92-1P  
143847-93-2P 143847-94-3P 143847-95-4P  
143847-96-5P 143847-97-6P 143847-98-7P  
143865-51-4P 143865-52-5P 143865-53-6P 143865-54-7P  
143865-55-8P 143865-56-9P 143865-57-0P 143865-58-1P  
143865-59-2P 143865-60-5P 143865-61-6P 143865-62-7P  
143865-63-8P 143865-64-9P 143865-65-0P 143865-66-1P 143865-68-3P  
143865-69-4P 143893-38-3P 143893-39-4P 143893-40-7P  
143893-41-8P 143893-42-9P 143901-08-0P 143955-78-6P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, as cell adhesion inhibitor)

IT 69174-86-3P 131618-71-8P 143783-31-7P 143865-49-0P  
143865-50-3P  
RL: SPN (Synthetic preparation); PREP (Preparation)  
(preparation of, in cell adhesion inhibitor preparation)

IT 100-39-0, Benzyl bromide  
 RL: BIOL (Biological study)  
 (serine derivative benzylation with)  
 OS.CITING REF COUNT: 5 THERE ARE 5 CAPLUS RECORDS THAT CITE THIS RECORD  
 (5 CITINGS)

L28 ANSWER 32 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1992:256563 HCAPLUS Full-text

DOCUMENT NUMBER: 116:256563

ORIGINAL REFERENCE NO.: 116:43517a, 43520a

TITLE: Crosslinked, hydrophilic, azlactone-functional  
 polymeric beads: a two-step approach

AUTHOR(S): Rasmussen, Jerald K.; Heilmann, Steven M.; Krepski,  
 Larry R.; Jensen, Karen M.; Mickelson, John; Johnson,  
 Kim

CORPORATE SOURCE: Corp. Res. Lab., 3M, St. Paul, MN, 55414, USA

SOURCE: Reactive Polymers (1992), 16(2), 199-212

CODEN: REPLEN; ISSN: 0923-1137

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The title beads were readily prepared by a 2-step approach involving: (1)  
 reverse-phase suspension copolymn. of N-acryloylamino acids with ~~water-soluble~~  
 crosslinkers and, optionally, dimethylacrylamide, followed by (2)  
 cyclodehydration of pendant acylamino acid groups to azlactones using Ac2O.  
 Azlactone functionalities of 0.3-3.0 mequiv (typically >70% of the theor.  
 value) were achieved by this procedure. The azlactone functional group in  
 these beads was quite reactive towards amine nucleophiles, even in aqueous  
 solution where little competition from hydrolysis was observed. Rapid,  
 covalent coupling of protein could be accomplished from aqueous media under  
 mild conditions, and indicated a potential for extremely high coupling  
 densities ( $\leq 245$  mg protein/g of beads).

IT 141266-25-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)

(preparation and cyclization of)

RN 141266-25-3 HCAPLUS

CN Alanine, 2-methyl-N-(1-oxo-2-propenyl)-, polymer with  
 N,N-dimethyl-2-propenamide and N,N'-[1,2-ethanediylbis[imino(1,1-dimethyl-  
 2-oxo-2,1-ethanediyl)]]bis[2-propenamide], sodium salt (9CI) (CA INDEX  
 NAME)

CM 1

CRN 141266-24-2

CMF (C16 H26 N4 O4 . C7 H11 N O3 . C5 H9 N O)x

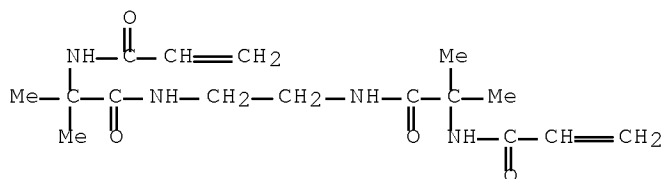
CCI PMS

CM 2

CRN 116000-33-0

CMF C16 H26 N4 O4

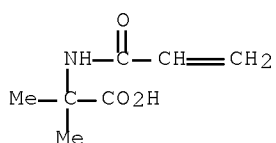
10/588514



CM 3

CRN 29513-50-6

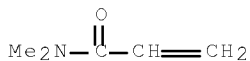
CMF C7 H11 N O3



CM 4

CRN 2680-03-7

CMF C5 H9 N O



CC 37-3 (Plastics Manufacture and Processing)

Section cross-reference(s): 34, 38, 80

IT 141266-25-3P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(preparation and cyclization of)

IT 116000-32-9DP, cyclized 116000-34-1DP, cyclized

116000-36-3DP, cyclized 116000-37-4DP, cyclized

120029-82-5DP, cyclized 141266-25-3DP, cyclized

141266-26-4DP, cyclized 141266-27-5DP, cyclized

141266-28-6DP, cyclized 141266-29-7DP, cyclized

141266-32-2DP, cyclized 141266-34-4DP, cyclized

RL: SPN (Synthetic preparation); PREP (Preparation)

(preparation of azlactone group-containing, functionality and particle size

and

protein immobilization in relation to)

OS.CITING REF COUNT: 7 THERE ARE 7 CAPLUS RECORDS THAT CITE THIS RECORD (7 CITINGS)

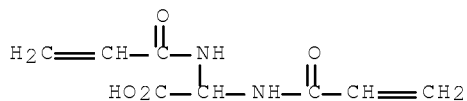
L28 ANSWER 33 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

# 10/588514

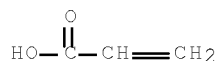
ACCESSION NUMBER: 1992:237038 HCAPLUS Full-text  
 DOCUMENT NUMBER: 116:237038  
 ORIGINAL REFERENCE NO.: 116:40169a,40172a  
 TITLE: Preparation and use of powdered superabsorbants  
 containing silica  
 INVENTOR(S): Mallo, Paul  
 PATENT ASSIGNEE(S): Societe Francaise Hoechst S. A., Fr.  
 SOURCE: Eur. Pat. Appl., 7 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 471595	A1	19920219	EP 1991-401806	19910702 <--
R: AT, BE, CH, DE, ES, FR, GB, IT, LI, LU, NL, SE				
FR 2665903	A1	19920221	FR 1990-10338	19900814 <--
FR 2665903	B1	19921204		
CA 2045425	A1	19920215	CA 1991-2045425	19910625 <--
CA 2045425	C	20000530		
US 5147921	A	19920915	US 1991-720648	19910625 <--
JP 04256435	A	19920911	JP 1991-193328	19910802 <--
PRIORITY APPLN. INFO.:			FR 1990-10338	A 19900814 <--

AB Powdered, hydrophilic, water-insol. superabsorbents contain 1-45% colloidal SiO<sub>2</sub> [average primary particle size (D) 9-50 nm] and 99-55% crosslinked acrylic acid (I) polymer or its Na or K salt. Redox polymerization of an aqueous mixture of I 108, bisacrylamidoacetic acid 0.0546, KOH 60.6, DTPA Na salt 0.325, and a 50% aqueous SiO<sub>2</sub> sol (D 50 nm) 80 g at 40-45° gave 189 g white powder with absorption of H<sub>2</sub>O and 0.9% NaCl 248 and 34 g/g, resp.; vs. 138 and 14, resp., for a mech. mixture of polymer and SiO<sub>2</sub>.  
 IT ~~141392-77-0P~~  
 RL: PREP (Preparation)  
 (superabsorbents, containing colloidal silica, manufacture of)  
 RN 141392-77-0 HCAPLUS  
 CN 2-Propenoic acid, polymer with bis[(1-oxo-2-propenyl)amino]acetic acid (9CI) (CA INDEX NAME)  
 CM 1  
 CRN 4387-85-3  
 CMF C8 H10 N2 O4



CM 2  
 CRN 79-10-7  
 CMF C3 H4 O2



IC ICM C08K003-36  
 ICS C08F002-44; C08F020-26; A61L015-00; C08L033-02  
 CC 38-3 (Plastics Fabrication and Uses)  
 ST superabsorbent polymer colloidal silica; acrylic acid copolymer  
 absorbent; bisacrylamidoacetic acid copolymer absorbent;  
 adsorbent super polymer silica  
 IT Absorbents  
 (super-, for water, crosslinked acrylic acid polymer-colloidal silica  
 blends as)  
 IT 141392-77-0P 141432-44-2P  
 RL: PREP (Preparation)  
 (superabsorbents, containing colloidal silica, manufacture of)  
 OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD  
 (18 CITINGS)

L28 ANSWER 34 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN  
 ACCESSION NUMBER: 1992:195102 HCAPLUS Full-text  
 DOCUMENT NUMBER: 116:195102  
 ORIGINAL REFERENCE NO.: 116:33087a,33090a  
 TITLE: Hydrophilic and amphipathic acrylic monomers for use  
 in preparing electrophoretic gels  
 INVENTOR(S): Kozulic, Branko; Heimgartner, Urs  
 PATENT ASSIGNEE(S): Switz.  
 SOURCE: Brit. UK Pat. Appl., 29 pp.  
 CODEN: BAXXDU  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 2  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
GB 2246127	A	19920122	GB 1990-8873	19900420 <--
GB 2246127	B	19940608		
JP 04227612	A	19920817	JP 1991-88887	19910420 <--
JP 3184234	B2	20010709		
US 5185466	A	19930209	US 1991-688752	19910422 <--
US 5202007	A	19930413	US 1991-696696	19910507 <--
US 5278270	A	19940111	US 1992-972343	19921106 <--
US 5438092	A	19950801	US 1993-145635	19931104 <--
GB 2270766	A	19940323	GB 1993-22874	19931105 <--
GB 2270766	B	19940608		
PRIORITY APPLN. INFO.:			US 1989-293840	B2 19890105 <--
			GB 1990-8873	A 19900420 <--
			US 1991-688752	A2 19910422 <--
			US 1991-696696	A2 19910507 <--
			US 1992-972343	A3 19921106 <--

OTHER SOURCE(S): MARPAT 116:195102  
 AB Acrylic monomers CH<sub>2</sub>:CR<sub>3</sub>CONR<sub>2</sub>CHR<sub>1</sub>(CHOH)<sub>n</sub>CH<sub>2</sub>OH [R<sub>1</sub> = H, (CHOH)<sub>m</sub>; m = 0, 1, 2;  
 R<sub>2</sub> = hydroxyalkyl, polyhydroxyalkyl, C<sub>2</sub>-30 hydrocarbon moiety; R<sub>3</sub> = H, Me; n =  
 1-4] are prepared and (co)polymerized and optionally cross-linked to gels  
 useful in electrophoretic sepns. Thus, N-acryloyl-N-ethyl-1-amino-1-deoxy-D-  
 galactitol (prepared from N-ethyl-1-amino-1-deoxy-D-galactitol and acryloyl  
 chloride) was prepared and polymerized with N,N'-methylenebisacrylamide to a

# 10/588514

transparent gel, which was run for 3 h in a submerged electrophoretic gel apparatus at 4 V/cm, stained with bromphenol blue, and used to sep. 3 standard DNA mixts., with resolution of bands.

IT 140852-66-0P

RL: PREP (Preparation)

(gels, preparation of, for electrophoresis sepns.)

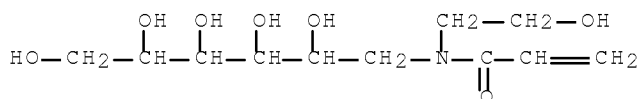
RN 140852-66-0 HCAPLUS

CN D-Glucitol, 1-deoxy-1-[(2-hydroxyethyl)(1-oxo-2-propenyl)amino]-, polymer with N,N'-methylenebis[2-propenamide] (9CI) (CA INDEX NAME)

CM 1

CRN 140852-65-9

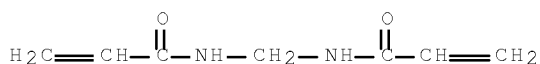
CMF C11 H21 N O7



CM 2

CRN 110-26-9

CMF C7 H10 N2 O2



IC ICM C07D233-20

ICS C08F020-58; G01N027-26

CC 35-4 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 33, 36, 38

IT 140852-66-0P

RL: PREP (Preparation)

(gels, preparation of, for electrophoresis sepns.)

IT 140713-77-5P 140852-63-7P 140852-67-1P

140852-68-2P 140852-69-3P

RL: PREP (Preparation)

(gels, preparation of, for electrophoretic separation)

IT 140852-64-8P 140923-98-4P

RL: PREP (Preparation)

(preparation of, as gels for electrophoretic sepns.)

IT 140852-60-4P

RL: PREP (Preparation)

(preparation of, water-soluble)

IT 140852-61-5P 140852-62-6P 140852-63-7P

RL: PREP (Preparation)

(preparation of, water-soluble, for gels for electrophoretic sepns.)

OS.CITING REF COUNT: 8 THERE ARE 8 CAPLUS RECORDS THAT CITE THIS RECORD

10/588514

(10 CITINGS)

L28 ANSWER 35 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1992:43345 HCAPLUS Full-text

DOCUMENT NUMBER: 116:43345

ORIGINAL REFERENCE NO.: 116:7451a,7454a

TITLE: Paper strength additives with good tolerance to pH fluctuation and soluble salts

INVENTOR(S): Matsubara, Tsugio; Hayano, Saburo; Toki, Hirotooshi; Tsutsumi, Haruki

PATENT ASSIGNEE(S): Mitsui Toatsu Chemicals, Inc., Japan

SOURCE: Jpn. Kokai Tokkyo Koho, 10 pp.

CODEN: JKXXAF

DOCUMENT TYPE: Patent

LANGUAGE: Japanese

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
JP 03227489	A	19911008	JP 1990-18868	19900131 <--
JP 2912403	B2	19990628		

PRIORITY APPLN. INFO.: JP 1990-18868 19900131 <--

AB The title agents are (meth)acrylamide polymers prepared by polymerization in the presence of water-soluble polymers. Stirring [(methacryloyloxy)ethyl]trimethylammonium chloride 180, glycidyl methacrylate 20, and water 750 parts with 10% (NH<sub>4</sub>)<sub>2</sub>S<sub>2</sub>O<sub>8</sub> and 10% NaHSO<sub>3</sub> for 3 h gave a polymer which was diluted with water to 1000 parts. Stirring this solution 150, 40% acrylamide 280, 80% acrylic acid 10, and water 400 parts at pH 4.5 and 40° with catalysts as above for 3 h gave a polymer solution which was diluted to 1000 parts with water. Handsheets (150 g/m<sup>2</sup>) made from a 1% slurry of corrugated-board recycled pulp (CSF 450 mL) containing alum (pH 4.7, 5.6 and 6.5, resp.) and 0.5% (solids, based on dry pulp) of the above solution showed uniform strength.

IT 138321-29-6

RL: USES (Uses)

(strengthening additives for paper, resistant to pH variation)

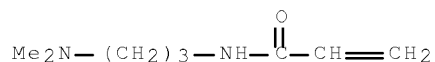
RN 138321-29-6 HCAPLUS

CN 2-Propenoic acid, polymer with N-[3-(dimethylamino)propyl]-2-propenamide, N-(hydroxymethyl)-2-propenamide, 2-propenamide and 2-propenenitrile (9CI) (CA INDEX NAME)

CM 1

CRN 3845-76-9

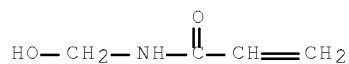
CMF C8 H16 N2 O



CM 2

CRN 924-42-5

CMF C4 H7 N O2



CM 3

CRN 107-13-1

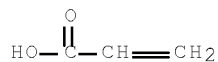
CMF C3 H3 N



CM 4

CRN 79-10-7

CMF C3 H4 O2



CM 5

CRN 79-06-1

CMF C3 H5 N O



IC ICM D21H017-37

CC 43-7 (Cellulose, Lignin, Paper, and Other Wood Products)

Section cross-reference(s): 38

IT 25568-39-2, Acrylamide-dimethylaminoethyl methacrylate copolymer  
 25987-30-8, Acrylamide-acrylic acid copolymer sodium salt 52255-48-8,  
 Acrylic acid-N-methylolacrylamide copolymer sodium salt 89678-87-5  
 138321-29-6

RL: USES (Uses)

(strengthening additives for paper, resistant to pH variation)

OS.CITING REF COUNT: 1 THERE ARE 1 CAPLUS RECORDS THAT CITE THIS RECORD  
 (1 CITINGS)

L28 ANSWER 36 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1991:248863 HCAPLUS Full-text



## 10/588514

DOCUMENT NUMBER: 114:248863  
 ORIGINAL REFERENCE NO.: 114:42027a,42030a  
 TITLE: Preparation of ampholytic, hydrophilic polymers for use as ~~absorbents~~  
 INVENTOR(S): Mallo, Paul  
 PATENT ASSIGNEE(S): Societe Francaise Hoechst S. A., Fr.  
 SOURCE: Eur. Pat. Appl., 6 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: French  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 408433	A1	19910116	EP 1990-401964	19900706 <--
EP 408433	B1	19930929		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE				
FR 2649710	A1	19910118	FR 1989-9408	19890712 <--
AT 95201	T	19931015	AT 1990-401964	19900706 <--
ES 2060103	T3	19941116	ES 1990-401964	19900706 <--
JP 03081310	A	19910405	JP 1990-185163	19900711 <--
PRIORITY APPLN. INFO.:			FR 1989-9408	A 19890712 <--
			EP 1990-401964	A 19900706 <--

AB The title ~~absorbents~~, useful in aqueous salt solns., are polymers from (dimethylamino)ethyl acrylate (quaternized or neutralized), acrylic acid, Na or K acrylate, and 0.001-0.1 mol% crosslinking monomer. Adding a solution of KOH 1.26, bisacrylamidoacetic acid 0.00046, DTPA 0.00025, acrylic acid 1.75, [2-(methacryloyloxy)ethyl]trimethylammonium chloride 0.75, and Na<sub>2</sub>S<sub>2</sub>O<sub>8</sub> 0.0015 mol in 638 g H<sub>2</sub>O over 90 min to a refluxing solution of 3.5 g Et cellulose in 638 g cyclohexane and refluxing for 1 h gave 325 g copolymer with absorption of H<sub>2</sub>O 128.3, aqueous NaCl (9 g/L) 24.4, aqueous CaCl<sub>2</sub> (9 g/L) 17.6, and seawater 21 g/g.

IT 134043-52-0

RL: USES (Uses)

(~~absorbents~~, for aqueous salt solns., manufacture of)

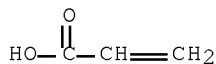
RN 134043-52-0 HCAPLUS

CN Ethanaminium, N,N,N-trimethyl-2-[(2-methyl-1-oxo-2-propenyl)oxy]-, chloride, polymer with bis[(1-oxo-2-propenyl)amino]acetic acid, potassium 2-propenoate and 2-propenoic acid (9CI) (CA INDEX NAME)

CM 1

CRN 10192-85-5

CMF C3 H4 O2 . K



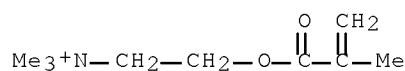
● K

CM 2

CRN 5039-78-1

10/588514

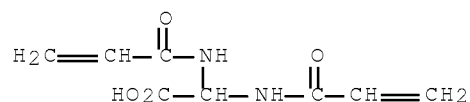
CMF C9 H18 N O2 . Cl



CM 3

CRN 4387-85-3

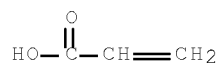
CMF C8 H10 N2 O4



CM 4

CRN 79-10-7

CMF C3 H4 O2



IC ICM C08F220-34

ICS C08F220-06

CC 38~3 (Plastics Fabrication and Uses)

Section cross-reference(s): 35

ST absorbent salt soln polymer; seawater absorbent  
polymer; acrylic acid copolymer absorbent; potassium acrylate  
copolymer absorbent; bisacrylamidoacetic acid copolymer  
absorbent; trimethylammonioethyl acrylate copolymer  
absorbent; ampholytic polymer absorbent; quaternary  
ammonium polymer absorbent

IT Waters, ocean

(absorbents for, ampholytic acrylic polymers as)

IT Absorbents

(for aqueous salt solns., ampholytic acrylic polymers as)

IT Quaternary ammonium compounds, polymers

RL: USES (Uses)

(polymers, absorbents, for aqueous salt solns., manufacture of)

IT 134043-52-0

RL: USES (Uses)

10/588514

(absorbents, for aqueous salt solns., manufacture of)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)

L28 ANSWER 37 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 1989:574876 HCAPLUS Full-text  
DOCUMENT NUMBER: 111:174876  
ORIGINAL REFERENCE NO.: 111:29147a,29150a  
TITLE: Preparation and use of hydrophilic swellable graft  
polymers  
INVENTOR(S): Engelhardt, Friedrich; Riegel, Ullrich  
PATENT ASSIGNEE(S): Cassella A.-G., Fed. Rep. Ger.  
SOURCE: Ger. Offen., 7 pp.  
CODEN: GWXXBX  
DOCUMENT TYPE: Patent  
LANGUAGE: German  
FAMILY ACC. NUM. COUNT: 1  
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
-----	----	-----	-----	-----
DE 3738602	A1	19890524	DE 1987-3738602	19871113 <--
US 4931497	A	19900605	US 1988-264022	19881028 <--
FI 8805049	A	19890514	FI 1988-5049	19881102 <--
FI 96218	B	19960215		
FI 96218	C	19960527		
CA 1332251	C	19941004	CA 1988-582704	19881110 <--
DK 8806310	A	19890514	DK 1988-6310	19881111 <--
EP 316792	A2	19890524	EP 1988-118802	19881111 <--
EP 316792	A3	19910227		
EP 316792	B1	19940119		
R: BE, CH, DE, ES, FR, GB, GR, IT, LI, NL, SE				
JP 01165615	A	19890629	JP 1988-284054	19881111 <--
JP 2895075	B2	19990524		
ES 2061608	T3	19941216	ES 1988-118802	19881111 <--
PRIORITY APPLN. INFO.:			DE 1987-3738602	A 19871113 <--

AB The title polymers, having high gel strength in the swollen state and useful in diapers, tampons, sanitary napkins, etc., contain 0.5-20% CH(CO2H)CHCO2[(C(R1)CH2O)nCOCHCH(CO2H) (R1 = H, Me; n = 2-300) groups, 79-99% CH(R4)C(R2)R3 [R2 = H, Me, Et; R3 = CO2H, SO3H, or PO3H2 group (or ester) or - CONHCHMe2CH2R5 (R5 = SO3H, PO3H2); R4 = H, Me, Et, CO2H] groups, and 0.1-2% crosslinking monomer containing ≥2 double bonds. The graft polymers have high absorption rates and are nontacky in the swollen state. Thus, adding 39.2 g maleic anhydride to 345 g 0.2:1.6 ethylene oxide-propylene oxide copolymer (OH value 65), stirring at room temperature, and stirring at 80°, gave a grafting substrate (I). Redox polymerization of an aqueous mixture of 100 g I, 12 g trimethylolpropane triacrylate, and Na acrylate (from 1888 g acid) gave a graft copolymer showing good fluid retention in a diaper.

IT 123198-91-4P

RL: PREP (Preparation)

(absorbents for aqueous systems, manufacture of)

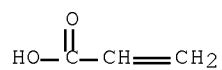
RN 123198-91-4 HCAPLUS

CN 2-Propenoic acid, sodium salt, polymer with bis[(1-oxo-2-propenyl)amino]acetic acid and methyloxirane polymer with oxirane (2Z)-2-butenedioate, graft (9CI) (CA INDEX NAME)

CM 1

CRN 7446-81-3

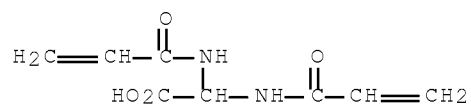
CMF C3 H4 O2 . Na



CM 2

CRN 4387-85-3

CMF C8 H10 N2 O4



CM 3

CRN 57916-91-3

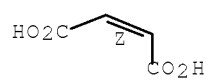
CMF C4 H4 O4 . x (C3 H6 O . C2 H4 O)x

CM 4

CRN 110-16-7

CMF C4 H4 O4

Double bond geometry as shown.



CM 5

CRN 9003-11-6

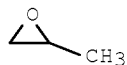
CMF (C3 H6 O . C2 H4 O)x

CCI PMS

CM 6

CRN 75-56-9

CMF C3 H6 O



CM 7

CRN 75-21-8

CMF C2 H4 O



IC ICM C08F283-06  
ICS B01J020-26; A61F013-18; A41B013-02  
ICA C08G065-32  
ICI C08F283-06, C08F220-04, C08F228-02, C08F230-02, C08F220-58  
CC 35-4 (Chemistry of Synthetic High Polymers)  
Section cross-reference(s): 19, 38, 63  
ST graft polymer ~~absorbent~~ water; polyoxyalkylene maleate graft polymer; acrylate sodium graft polymer; crosslinking agent graft polymer; trimethylolpropane acrylate crosslinker; diaper graft polymer ~~absorbent~~; tampon graft polymer ~~absorbent~~; sanitary napkin graft polymer ~~absorbent~~  
IT Diapers  
(~~absorbents~~ for, acrylate-grafted polyoxyalkaline maleates as)  
IT ~~Absorbents~~  
(for water, acrylate-grafted polyoxyalkaline maleates as)  
IT Crosslinking agents  
(polyunsatd. compds., for acrylate graft polymers as ~~absorbents~~ for water)  
IT Medical goods  
(sanitary napkins, ~~absorbents~~ for, acrylate-grafted polyoxyalkaline maleates as)  
IT Medical goods  
(tampons, ~~absorbents~~ for, acrylate-grafted polyoxyalkaline maleates as)  
IT 123198-90-3P ~~123198-91-4P~~ 123198-93-6P 123198-95-8P  
123198-97-0P ~~123198-99-2P~~ 123223-03-0P 123245-24-9P  
~~123245-26-1P~~ 123245-28-3P ~~123245-30-7P~~  
~~123245-32-9P~~ 123245-34-1P 123245-36-3P 123245-38-5P  
123245-40-9P 123274-53-3P  
RL: PREP (Preparation)  
(~~absorbents~~ for aqueous systems, manufacture of)  
OS.CITING REF COUNT: 11 THERE ARE 11 CAPLUS RECORDS THAT CITE THIS RECORD (11 CITINGS)

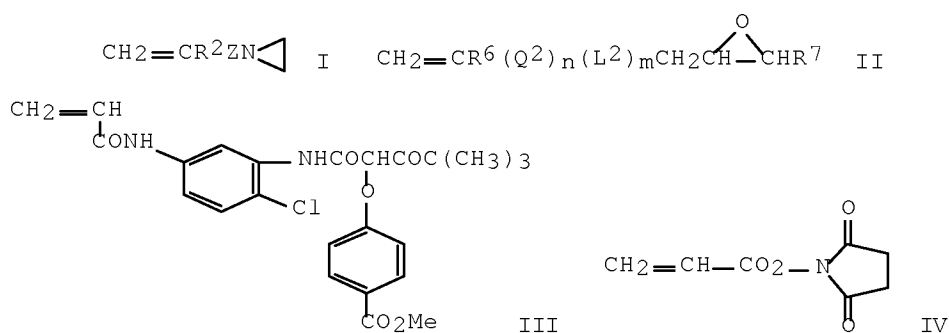
L28 ANSWER 38 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN  
ACCESSION NUMBER: 1989:125237 HCAPLUS Full-text  
DOCUMENT NUMBER: 110:125237  
ORIGINAL REFERENCE NO.: 110:20489a,20492a

# 10/588514

TITLE: Color photographic material containing polymeric coupler incorporating group crosslinking gelatin  
 INVENTOR(S): Sakanoue, Kei; Ishii, Yoshio; Hirano, Tsumoru  
 PATENT ASSIGNEE(S): Fuji Photo Film Co., Ltd., Japan  
 SOURCE: Eur. Pat. Appl., 204 pp.  
 CODEN: EPXXDW  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
EP 280330	A2	19880831	EP 1988-102925	19880226 <--
EP 280330	A3	19890920		
EP 280330	B1	19930721		
R: DE, FR, GB, NL				
JP 63210924	A	19880901	JP 1987-44790	19870227 <--
JP 63210925	A	19880901	JP 1987-44791	19870227 <--
JP 63210926	A	19880901	JP 1987-44792	19870227 <--
US 4960688	A	19901002	US 1988-161865	19880229 <--
PRIORITY APPLN. INFO.:			JP 1987-44790	A 19870227 <--
			JP 1987-44791	A 19870227 <--
			JP 1987-44792	A 19870227 <--
			JP 1987-315766	A 19871214 <--

GI



AB The title ~~H2O-soluble~~ coupler contains a vinyl monomer having a color coupler moiety and  $\geq 1$  monomer selected from monomers of the formula:  $\text{CH}_2:\text{CR}_1(\text{L})_k\text{X}$  [ $\text{R}_1 = \text{H}$ , C1-6 alkyl, Cl;  $\text{L} = \text{C}1-20$  divalent group;  $k = 0, 1$ ;  $\text{X} = \text{active ester group}$ ], I [ $\text{R}_2 = \text{H}$ , Cl, alkyl;  $\text{Z} = \text{CO}$ ,  $\text{NHCO}$ ,  $\text{CO}_2\text{R}_3$ ;  $\text{R}_3 = \text{alkylene}$ ],  $\text{CH}_2:\text{CR}_4\text{Q}_1\text{L}_1\text{SO}_2\text{R}_5$  [ $\text{R}_4 = \text{H}$ , C1-6 alkyl;  $\text{Q}_1 = \text{CO}_2$ ,  $\text{CONR}_1$ , C6-10 arylene;  $\text{L}_1 = \text{divalent group}$ ;  $\text{R}_5 = \text{CH}:\text{CH}_2$ ,  $\text{CH}_2\text{CH}_2\text{X}$ ;  $\text{X} = \text{group capable of being substituted by a nucleophilic group or being released by a base in the form of HX}$ ]; II [ $\text{R}_6 = \text{R}_2$ ;  $\text{Q}_2 = \text{CO}_2$ ,  $\text{CONR}_2$ , C6-10 arylene;  $\text{L}_2 = \text{L}_1$ ;  $\text{R}_7 = \text{H}$ , alkyl;  $m, n = 0$  or  $1$ ; and  $m$  and  $n$  are not  $0$  at the same time]. The coupler has excellent diffusion resistance, provides a sufficiently high image d., and has a rapid rate of crosslinking with gelatin. The photog. material has excellent layer strength and image sharpness. Thus, a III-IV-Na methacrylate copolymer was prepared and used as a yellow coupler in a photog. film. The coupler had excellent diffusion resistance.

IT 118038-04-3

# 10/588514

RL: TEM (Technical or engineered material use); USES (Uses)  
(photog. cyan coupler, with excellent diffusion resistance)

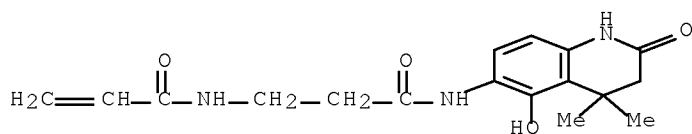
RN 118038-04-3 HCAPLUS

CN 1-Propanesulfonic acid, 2-methyl-2-[(1-oxo-2-propenyl)amino]-, monosodium salt, polymer with N-(1-methylethenyl)-1-aziridinecarboxamide and N-[3-oxo-3-[(1,2,3,4-tetrahydro-5-hydroxy-4,4-dimethyl-2-oxo-6-quinoliny]amino]propyl]-2-propenamide (9CI) (CA INDEX NAME)

CM 1

CRN 118038-03-2

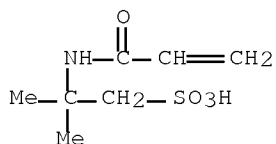
CMF C17 H21 N3 O4



CM 2

CRN 5165-97-9

CMF C7 H13 N O4 S . Na

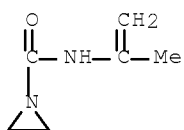


● Na

CM 3

CRN 2495-22-9

CMF C6 H10 N2 O



IC ICM G03C007-32

ICA C08F222-38

CC 74-2 (Radiation Chemistry, Photochemistry, and Photographic and Other Reprographic Processes)

Section cross-reference(s): 38

IT 118038-02-1 ~~118038-04-3~~ 118038-06-5 118038-09-8  
 118038-11-2 118038-34-9 ~~118038-37-2~~ 118038-38-3  
 118038-39-4 118038-41-8 ~~118038-62-3~~ 118038-64-5  
 118038-65-6 118038-66-7 118065-99-9 118066-22-1  
~~118066-23-2~~ 118066-24-3 118066-25-4 118066-26-5  
 RL: TEM (Technical or engineered material use); USES (Uses)  
 (photog. cyan coupler, with excellent diffusion resistance)  
 IT 118038-18-9 118038-20-3 118038-22-5 118038-24-7 118038-27-0  
 118038-29-2 118038-43-0 118038-45-2 118038-46-3 118038-47-4  
 118038-51-0 118038-52-1 118038-54-3 ~~118038-55-4~~  
 118065-93-3 118065-94-4 118065-96-6 118066-00-5 118066-01-6  
 118066-02-7 118066-03-8 118066-04-9 118066-06-1 118066-07-2  
~~118066-13-0~~ ~~118066-15-2~~

RL: TEM (Technical or engineered material use); USES (Uses)  
 (photog. yellow coupler, with excellent diffusion resistance)

L28 ANSWER 39 OF 39 HCAPLUS COPYRIGHT 2009 ACS on STN

ACCESSION NUMBER: 1985:167699 HCAPLUS Full-text

DOCUMENT NUMBER: 102:167699

ORIGINAL REFERENCE NO.: 102:26388h,26389a

TITLE: Crosslinked copolymer and its use as an  
 absorbent

INVENTOR(S): Keil, Karl Heinz; Engelhardt, Fritz; Greiner, Ulrich;  
 Kuehlein, Klaus; Keller, Reinhold; Schlingmann,  
 Merten; Hess, Gerhard

PATENT ASSIGNEE(S): Cassella A.-G., Fed. Rep. Ger.

SOURCE: Ger. Offen., 26 pp.

CODEN: GWXXBX

DOCUMENT TYPE: Patent

LANGUAGE: German

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3324835	A1	19850117	DE 1983-3324835	19830709 <--
EP 134921	A1	19850327	EP 1984-106958	19840618 <--
EP 134921	B1	19870520		
R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
AT 27289	T	19870615	AT 1984-106958	19840618 <--
US 4576973	A	19860318	US 1984-623708	19840622 <--
ZA 8405025	A	19850227	ZA 1984-5025	19840702 <--
CA 1238445	A1	19880621	CA 1984-457984	19840703 <--
JP 60036513	A	19850225	JP 1984-139167	19840706 <--
PRIORITY APPLN. INFO.:			DE 1983-3324835	A 19830709 <--
			EP 1984-106958	A 19840618 <--

AB Crosslinked copolymers prepared from a heterocyclic compound containing 5 ring atoms, >1 of which is N, and a polymerizable olefinic group and ≥1 crosslinking monomer are useful as adsorbents for the separation of acid from solns. Thus, 40 g 1-vinylimidazole, 2.5 g (H<sub>2</sub>C:CHCONH)<sub>2</sub>CH<sub>2</sub>, and 2.5 g [H<sub>2</sub>C:CHCO<sub>2</sub>(CH<sub>2</sub>)<sub>3</sub>SiMe<sub>2</sub>OSiMe<sub>2</sub>]<sub>2</sub>O was dissolved in 45 mL water containing 4,4'-azobis(cyanopentanoic acid). The solution was added to 300 mL heptane containing 1 g lipophilic protective colloid and stirred 1 h at 70° to give 42 g copolymer [95991-29-0] beads which adsorbed 75 g lactic acids/g beads when water containing 1% lactic acid was passed over the beads. The lactic acid was eluted with MeOH or acetone.

IT ~~96019-12-4P~~



10/588514

RL: PREP (Preparation)  
(preparation of, as adsorbent for acids)

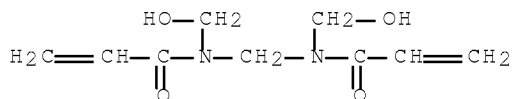
RN 96019-12-4 HCAPLUS

CN 2-Propenamide, N,N'-methylenebis[N-(hydroxymethyl)-, polymer with  
4-ethenylthiazole (9CI) (CA INDEX NAME)

CM 1

CRN 28711-05-9

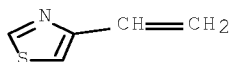
CMF C9 H14 N2 O4



CM 2

CRN 13816-03-0

CMF C5 H5 N S



IC ICM C08F226-06

ICS C08F230-04; C08F230-06; C08F230-08; B01J020-26; C08F002-18;  
B01J041-14

CC 37-3 (Plastics Manufacture and Processing)  
Section cross-reference(s): 38

IT 95964-52-6P 95964-53-7P 95964-54-8P 95964-55-9P 95964-56-0P  
95964-57-1P 95964-58-2P 95964-59-3P 95964-60-6P 95991-27-8P  
95991-29-0P ~~96019-12-4P~~ 96037-72-8P

RL: PREP (Preparation)

(preparation of, as adsorbent for acids)

OS.CITING REF COUNT: 2 THERE ARE 2 CAPLUS RECORDS THAT CITE THIS RECORD  
(2 CITINGS)

10/588514

\*\*\*\*\* SEARCH HISTORY \*\*\*\*\*

=> d his nof

(FILE 'HOME' ENTERED AT 09:57:35 ON 15 OCT 2009)

FILE 'HCAPLUS' ENTERED AT 09:57:51 ON 15 OCT 2009

L1           1 SEA ABB=ON PLU=ON US20070167593/PN  
              D IALL  
              SEL RN

FILE 'REGISTRY' ENTERED AT 09:59:27 ON 15 OCT 2009

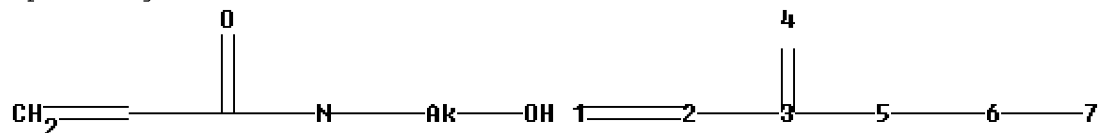
L2           11 SEA ABB=ON PLU=ON (106-91-2/BI OR 112783-16-1/BI OR 74-79-3/B  
              I OR 7646-67-5/BI OR 862587-05-1/BI OR 862587-06-2/BI OR  
              862587-07-3/BI OR 862587-08-4/BI OR 862587-09-5/BI OR 862587-10  
              -8/BI OR 9004-82-4/BI)  
              D SCA

FILE 'STNGUIDE' ENTERED AT 10:01:24 ON 15 OCT 2009

FILE 'REGISTRY' ENTERED AT 11:18:20 ON 15 OCT 2009

L3           STRUCTURE UPLOADED  
              D

Uploading L1.str



chain nodes :

1 2 3 4 5 6 7

chain bonds :

1-2 2-3 3-4 3-5 5-6 6-7

exact/norm bonds :

3-4 3-5 5-6 6-7

exact bonds :

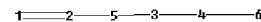
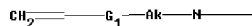
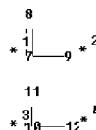
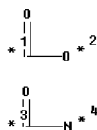
1-2 2-3

Match level :

1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS

L4           STRUCTURE UPLOADED  
              D

Uploading L2.str



```
chain nodes :
1 2 3 4 5 7 8 9 10 11 12
ring/chain nodes :
6
chain bonds :
1-2 2-5 3-4 3-5 4-6 7-8 7-9 10-11 10-12
exact/norm bonds :
2-5 3-4 3-5 4-6 7-8 7-9 10-11 10-12
exact bonds :
1-2
```

```
G1: [*1-*2], [*3-*4]
```

```
Match level :
1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS 9:CLASS
10:CLASS 11:CLASS 12:CLASS
```

```
L5          SCR 2043
L6          50 SEA SSS SAM L3 AND L4 AND L5
```

```
FILE 'STNGUIDE' ENTERED AT 11:37:34 ON 15 OCT 2009
```

```
FILE 'REGISTRY' ENTERED AT 11:39:23 ON 15 OCT 2009
```

```
L7          STRUCTURE UPLOADED
```

```
D
```

```
L8          5 SEA SSS SAM L7
```

```
D SCA
```

```
FILE 'STNGUIDE' ENTERED AT 11:42:00 ON 15 OCT 2009
```

```
FILE 'REGISTRY' ENTERED AT 11:44:08 ON 15 OCT 2009
```

```
L9          2669 SEA SSS FUL L3 AND L4 AND L5
```

```
L10         4 SEA ABB=ON PLU=ON L9 AND L2
```

```
SAVE TEMP L9 PEZ514RECOM/A
```

```
FILE 'STNGUIDE' ENTERED AT 11:45:54 ON 15 OCT 2009
```

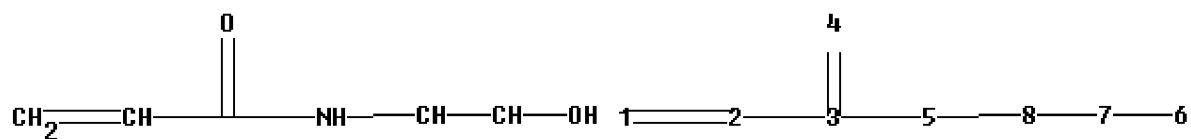
```
FILE 'REGISTRY' ENTERED AT 11:59:46 ON 15 OCT 2009
```

```
L11         STRUCTURE UPLOADED
```

```
D
```

```
Uploading L4.str
```

10/588514

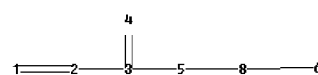
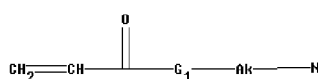


chain nodes :  
 1 2 3 4 5 6 7 8  
 chain bonds :  
 1-2 2-3 3-4 3-5 5-8 6-7 7-8  
 exact/norm bonds :  
 3-4 3-5 5-8 6-7  
 exact bonds :  
 1-2 2-3 7-8

Match level :  
 1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 7:CLASS 8:CLASS

L12 6 SEA SUB=L9 SSS SAM L11  
 L13 134 SEA SUB=L9 SSS FUL L11  
 SAVE TEMP L13 PEZ514REGL4/A  
 L14 STRUCTURE UPLOADED  
 D

Uploading L6.str



chain nodes :  
 1 2 3 4 5 6 8  
 chain bonds :  
 1-2 2-3 3-4 3-5 5-8 6-8  
 exact/norm bonds :  
 3-4 3-5 5-8 6-8  
 exact bonds :  
 1-2 2-3

G1:O,N

Match level :  
 1:CLASS 2:CLASS 3:CLASS 4:CLASS 5:CLASS 6:CLASS 8:CLASS

# 10/588514

L15           50 SEA SUB=L9 SSS SAM L14  
L16           1286 SEA SUB=L9 SSS FUL L14  
              SAVE TEMP L16 PEZ514REGL6/A

FILE 'HCAPLUS' ENTERED AT 12:09:42 ON 15 OCT 2009

L17           111 SEA ABB=ON PLU=ON L13  
L18           791 SEA ABB=ON PLU=ON L16  
L19           798 SEA ABB=ON PLU=ON L17 OR L18  
L20           655 SEA ABB=ON PLU=ON L19 AND (AY<2006 OR PY<2006 OR PRY<2006)  
L21           105 SEA ABB=ON PLU=ON L20 AND 38/SC,SX  
L22           84 SEA ABB=ON PLU=ON L21 (L) (COS OR IMF OR PREP OR BIOL)/RL  
L23           21 SEA ABB=ON PLU=ON L21 (L) (COS OR BIOL)/RL  
              D SCA TI HIT

L24           270376 SEA ABB=ON PLU=ON (H2O OR WATER) (2A) SOLUB?  
L25           11 SEA ABB=ON PLU=ON L21 AND L24  
L26           492082 SEA ABB=ON PLU=ON ABSORB?  
L27           12 SEA ABB=ON PLU=ON L21 AND L26  
L28           39 SEA ABB=ON PLU=ON L23 OR L25 OR L27  
              SAVE TEMP L28 PEZ514HCAP/A  
              D QUE L28  
              D L28 1-39 IBIB ABS FHITSTR HITIND